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BALTIMORE, OCTOBER 5, 1894.

"Facts About the South."

"Facts About the South," by Richard H. Edmonds, editor MANUFACTURERS' RECORD, Baltimore, Md., is an interesting pamphlet of thirty-two pages bristling with facts, partly unknown and partly forgotten by those who helped to create them thirty-five years ago, and a startling revelation to the younger generation of to-day who talk and write about the wonderful progress of the so-called new South.

This pamphlet is to some extent a compilation of the interesting articles from the pen of Mr. Edmonds which have from time to time appeared in the MANUFACTURERS' RECORD, the Forum, the *Southern States* and other periodicals, which we have occasionally clipped and commented upon in our columns. There is, however, a very large amount of additional information and statistics presented in attractive style, well calculated to interest all readers and hold their attention throughout the perusal of the entire pamphlet.

There is no price named for the publication, and hence we infer it is another contribution from Mr. Edmonds in furtherance of the interests of the Southern States. We think, however, the able editor of the MANUFACTURERS' RECORD has done more than his share in issuing such a valuable compendium of facts about the South, and that it will be in order for State, county and municipalities, as well as trade organizations or associations generally throughout the Southern States, to do the work of distribution without cost to Mr. Edmonds or those who have published this valuable pamphlet, and presumably the pamphlets will be furnished for this purpose at a low price per thousand copies.

It is undoubtedly the most valuable addition to the literature of the day bearing on the resources of the South which has come to our notice. Its publication is well-timed, and will give a fresh impetus to the march of progress throughout the Southern States.—Florida Facts.

MR. THOMAS WARD, general manager of the Birmingham Rolling Mill, writes the MANUFACTURERS' RECORD that since his recent letter the company has taken up the project of building a tinplate mill, and is now considering the matter.

Transmitting Electric-Power.

A dispatch from New York says:

The power and mining department of the General Electric Co. has, it is reported, closed a contract with the Sacramento Electric Power & Light Co., which calls for the transmission by electricity from a water-power at Folsom, Cal., twenty miles distant, of several thousand electrical horse-power to the city of Sacramento to supply lights, heat, power, etc.

The steady extension of the system of transmission of electric-power is every day becoming a more important factor in the business world. Years ago the MANUFACTURERS' RECORD, even when the business was in its earliest experimental stages, pointed out the probability of its success and the resultant influence upon the industrial advancement of the South. The South has an aggregate water-power of almost unlimited extent. It has many powers that can be developed to furnish from 5000 to 10,000 horse-power or over, some of which are not well located for utilization on the spot. By means of electrical transmission this power can be made available at some suitable site for the building of factories, the lighting of cities or the running of street cars. The success of the electrical-power equipment of the Columbia Cotton Mill has stimulated others to follow in the same line, and, as stated in the MANUFACTURERS' RECORD two weeks ago, the Pelzer Company, of South Carolina, will build a 50,000-spindle mill nearly three miles from the water-power. In some places South there are large water-powers which can be used to generate electricity with which to operate mining plants. This has been in contemplation at one point in South Carolina for some time, and in West Virginia a company has been organized for utilizing a great water-power, believing that many of the coal mines in the district will find it profitable to rent their electric-power from this central station. With the great number and aggregate magnitude of its water-powers, the South is one of the finest fields in the world in which electricians can operate. Here is unlimited opportunity for central power stations, for electrical transmission to individual mills, for the operation of street and mining railroads and for city lighting. What has been accomplished in electrical advancement in the South is but the beginning. The future will witness a wonderful progress in this line.

HON. CHAUNCEY F. BLACK, of Pennsylvania, replies in this issue to a letter published in the MANUFACTURERS' RECORD last week in regard to the Nicaragua Canal. As a non-partisan industrial journal, the MANUFACTURERS' RECORD has advocated the construction of this canal purely as a business matter, without relation to political parties. Governor Black believes that the democratic party should demand the building of this canal and gives his reasons

therefor. Of course, as a leading democrat, Governor Black naturally takes ground in favor of his party, but as we said when publishing his Raleigh speech, the MANUFACTURERS' RECORD has nothing to do with the political features of the discussion.

The South Receiving Attention.

The Evening Post, of New York, is evidently giving the South much attention at the present time. The many and pronounced indications for the better have been made the subject of careful study, the result of which has appeared in several able and conservative editorials, all the more valuable for the reason that they plainly show that they have only been written after a deep research into the question, and that they are simply a presentation of facts—so desirable to the South just at this time.

Referring to the possible change of investment of the bulk of home and foreign capital from other sections to the South, the Post comments as follows:

The South has, to begin with, a solid basis from which to make its start. The South is not over-capitalized; it is not, therefore, clogged with the wrecks of last year's commercial enterprises. In one sense the South is poor, yet this leaves the question open whether its poverty is due to lack of capacity for wealth production or merely to lack of population and progressive development. Southern writers have lately pointed out that by the showing of the census of 1890 even the farm production of the Southern States averages 24.1 per cent. on the capital invested, against 13.1 per cent. for all other farming sections of the United States combined. Agriculture alone, though in a great degree the basis of every country's wealth, is not, however, by itself a sure reliance for industrial expansion. But the South, as is well known, had, even before the panic of 1893, begun a new career in other lines. The cotton mills of the Carolinas, the iron furnaces and coal mines of Alabama and Tennessee, the lumber industries, the cottonseed oil production of the decade past, are familiar instances in point.

Such figures and others already published by the MANUFACTURERS' RECORD are quoted, as well as figures showing the abundant corn crop, and the situation outlined as follows:

This is a windfall of the greatest importance to the South; yet the movement of recuperation from the panic had begun in this section, and progressed more rapidly than elsewhere, long before the harvest was determined. It is a well-known fact that the Eastern dry goods market has for several months found in the South the only steady outlet for its accumulated stocks. It is the Southern railways which, as a group, are showing the largest gains in earnings over 1893, and the least shrinkage compared with 1892. Clearing-house exchanges tell substantially the same story. Of all the many and extensive bankrupt corporations, it is a Southern company which alone has made real and assured advances towards resumption.

A DISPATCH from Montgomery, Ala., says that a movement is on foot to organize a delegation of 500 of the leading business men of the South for the purpose of having them make a vigorous fight at Washington this winter in behalf of the Nicaragua Canal. The plan is for the commercial clubs of fifty or sixty of the largest towns in the South to send ten delegates each to Washington with instructions to stay there until the Nicaragua-canal bill is passed.

Why Southern Mills Prosper.

The prosperity of Southern cotton mills is a general expression which is being widely quoted at present, but just why they are so prosperous is something of which many Southern people are ignorant. Among the mills which have been prosperous, even during dull times, is the plant of the John P. King Manufacturing Co., at Augusta, Ga. Charles Estes, president of the company, has recently published a letter in which he says:

We have run every spindle and loom for several years on full time, and increased our looms both last year and the year before. We have now as many as we have power for. We have been well sold up for the last two years, and are sold largely ahead. Doubtless the final settlement of the tariff question has inspired people with more confidence, as there is a certain class of people who, Micawber-like, are always waiting for "something to turn up" to see how matters are going to work. We have never bothered ourselves about that in the least, but have gone right ahead and done a good business all the while, and hope to do so for some time to come.

Can any manufacturer in America or any other country desire a brighter outlook than this? Instead of "waiting for something to turn up," the King Company has "gone ahead" and worked out its own progress. This is one of the reasons why the mills of the South are doing so well. They are managed on business principles by business men who have grasped the situation and are making the most of it. They don't sit down and wait for fortune to come to them; they go after it—and are getting it.

A GENTLEMAN who has had long experience in South American trade, in a letter to the editor of the MANUFACTURERS' RECORD is rather bitter on American manufacturers. He says:

If our manufacturers had a tithe of the eager Latin impulse for intercourse between this country and South and Central America, we should rapidly develop an extensive export trade. Unfortunately, the circumference of the average manufacturer's horizon is about that of his hat brim. He suffers from the overproduction and competition and wants more consumers, but falters at the seaboard, although 50,000,000 of the Latin races and an affluent purchasing power await his service. The English can be dislodged in Central and South America, but not the German, and every six months of delay on our part is a loss of five years in favor of Teutonic incursions in commerce. I am really ashamed of my own countrymen, who are capable of an export trade, but who fail to grasp the opportunity.

THE MANUFACTURERS' RECORD is officially authorized to state that the report sent out from Boston last week that the Massachusetts Cotton Mills had decided to locate in Georgia is incorrect. The locality has not yet been decided upon. Commenting upon this dispatch, Mr. Charles E. Maxwell, of Boston, in a letter to the Advertiser, writes as follows:

I notice in my morning Advertiser under heading "Will Build Mill in Georgia" some statements regarding South Carolina which I cannot allow publicity without protest. "Tillmanism, etc., is so rife, and political conditions in the State are so peculiar as to make capitalists apprehensive of interference." This is not true. Tillman, whatever his faults politically, is the

farmer's friend, and he is and always has been using his influence to foster the building of cotton mills in South Carolina.

The laws in the State are especially favorable to capital desiring to build mills. That these facts are true is evidenced by the building of more mills in this State than any other for the past two years. Municipalities grant freedom from taxes, and citizens subscribe liberally to stock in such mills.

The new mill at Columbia, the largest now in the South, was built by Massachusetts and other New England men who were entirely conversant with the laws, and did not propose to invest a million dollars where there was danger of obstructive legislation.

Columbia has the largest water-power in the United States, excepting Niagara, and her citizens show by word, act and deed a kindly feeling for the Northern capitalist, and no one need fear that South Carolina will ever hamper capital desirous of investing in the State.

THE Commercial and Industrial Association of Montgomery, Ala., is making a move in the right direction. It is proposed to arrange and send two representative citizens to several manufacturing cities in the East with a view of interesting the latter in establishing enterprises in Montgomery. The representatives sent will show the great and natural advantages of the city, and will be armed with several propositions to offer as an inducement. More will be told of the movement later.

THE MANUFACTURERS' RECORD extends its congratulations to the Baltimore Journal of Commerce upon its new and attractive change of form and general make-up. It has renewed its youth, and under the progressive management of its new owner, Mr. W. J. B. Patterson, bids fair to take rank as one of the leading commercial papers of the country.

MR. C. P. HUNTINGTON elaborates in this issue his views recently briefly expressed in a letter to the MANUFACTURERS' RECORD on the desirability of great railroad consolidations. Mr. Huntington takes the ground that there should not be over three railroad systems in the entire country, and preferably only one.

HON. W. M. FISHBACK, governor of Arkansas, in a letter to the editor of the MANUFACTURERS' RECORD, says:

I have read your pamphlet, "Facts About the South," with intense interest. It is a revelation even to me, and I had supposed I was extravagant in my ideas of the South and its resources. Your pamphlet cannot fail to be of great benefit to Southern development.

How to Secure Land Buyers.

Southern land-owners and agents, immigration companies and all others interested in attracting the attention of fruit-growers, farmers and business men generally in the Northwest and New England, should advertise in the *Southern States* magazine. Many thousand copies of every issue go into the Northwestern and New England States. It is turning the attention of thousands of people in those sections to the South, and putting them in communication with those who are advertising Southern properties in it. There is no other medium through which so many fruit-growers and well-to-do farmers interested in moving South can be reached as the *Southern States* magazine. It is published by the Manufacturers' Record Publishing Co.

A REPORT from Lawrenceburg, Ky., states that diamonds have been found near Cornishville, a town in the vicinity of Lawrenceburg. A resident of Cornishville named Sutherland is interested.

C. P. HUNTINGTON'S VIEWS.

An Exhaustive Opinion on the Benefit of Railway Combinations.

With this issue the MANUFACTURERS' RECORD places before its readers an exhaustive opinion prepared for it by Mr. C. P. Huntington. Coming as it does from one of the most prominent railway presidents and financiers in the world, the article will be of much interest not only to those connected with railroads, but to the public generally. It is appended:

23 BROAD STREET, NEW YORK, Sept. 18.

Regarding the subject of railroad combinations, what I intended to say in my recent letter published in the MANUFACTURERS' RECORD, and what I did intimate, I think, was that it would be better for the people if there was only one great system of railroads in this country, and that there certainly ought not to be more than three. The advantages of economies that could thus be put in effect would be directly felt by a considerable reduction in the rates of transportation. It will, no doubt, be answered that competition brings about such reductions more certainly than any consolidation possibly could; but I think the majority of the people do not take pains to look deeply enough into this subject, or give to passing events the significant bearing they have upon this very question.

The disastrous side of competition is seen whenever it brings about an extent of rate reduction that leaves no profit on investment, and this point is almost always reached and passed—as the railroad history of this country will prove—until the absolute necessities of the situation and the prospect of certain ruin ahead compel a temporary correction in the rates, and this stands for a longer or shorter time, only to be followed by other rate wars, with all their attendant bitterness, disturbances of trade and recurrent losses. Reflect for a moment upon the railroad situation in this country today. On December 31, 1893, there were in the hands of receivers 128 railroads of this country, having a mileage of 40,277, or double that of all the combined railroads of Great Britain, and representing stock and bonds to the amount of \$2,217,656,000! In other words, 23 per cent. of all the mileage and 21 per cent. of all the capital of the roads of the entire United States! If anyone will calculate what this means to the hundreds of thousands of investors whose savings of years were placed honestly and in good faith in these various properties, in order that a regular income for the support of their families might be derived therefrom, and what it means, moreover, to the business of the country generally, because of the enforced economy among all those affected by the reduction or annihilation of income, and from whom the tradesmen, in their turn, derive their subsistence or profits, he will hesitate before joining in the popular clamor about "healthy competition," so called, and begin to realize that this competition is a creature oftener out of health than in health, and certainly as much to be distrusted as consolidation, since consolidation makes it possible to cheapen rates, and yet provides for a fair return on the investment, while competition forces an unnatural cheapness in the great majority of cases, and seldom limits it, even when the edge of ruin is in plain sight.

The necessities of the situation demand that a railroad company, in order to hold its business at competitive points, shall make considerable reductions on its rates to large shippers at such commercial centres, and since it must gather a certain amount of money from some source in order to meet its current and fixed expenses, it must make up its loss of profit by charging higher rates at points where no competition exists, even though these local points may be much nearer the market than the former. Even

in the case of two shippers, both located at competing points, the man who has fifteen carloads to ship is anxious to get a reduction on the rate for transporting his product, and he can go out among the competing lines and probably get it, whilst the shipper who has only one carload can hardly afford to spend time and trouble in seeing what he can do; nor is the amount involved in his case sufficient to induce the railroad company to make much effort to get it. The result is that the large shipper gets the advantage, and in both of the cases enumerated above a wrong is seemingly inflicted; yet it is not the fault of the railroad company that this is so, but simply the result of the situation, for it is the only thing that the railroad can do, as it must gather money to pay its fixed and current expenses, or go into bankruptcy. There is no other alternative.

If, on the other hand, the transportation lines of this country were controlled by one company—or, say, by three companies, if there were geographical reasons for it—the economies of a single management and the reduction in the expenses of operating would allow of the cheapening of rates, and the necessities of the situation would not then compel the railroad lines to take more from their local patrons than from those who do business at competing points.

There is much that could be written on this subject, but I have not the time to spare, and must leave for others to prove what needs no further confirmation in my own mind than is furnished by the observation and experience of thirty years of railroad business.

C. P. HUNTINGTON.

South Carolina Wants Immigrants.

The convention at Rock Hill, announced in the MANUFACTURERS' RECORD in a recent issue, was notable for the amount of work done and the attendance of delegates. Although called from only a few counties in the Piedmont region, no less than fifty-eight representatives were present. The work of the convention was condensed into a report outlining a plan of work which was decided upon. This report provides that a company shall be formed with \$10,000 capital in \$10.00 shares, and that each county represented shall take at least \$500 of the stock. This company will secure options on property offered for sale in the counties represented, and shall advertise it in the most practicable manner. One delegate from each county represented was empowered to organize a county society to aid the immigration company and assist desirable people who wish to reside in that particular section. J. A. Hoyt, of Greenville, was elected president of the convention, and Louis Sherfesse, of Rock Hill, secretary.

Jacksonville's New Oil Mill.

A dispatch from Jacksonville, Ala., to the Atlanta Constitution, says: "Jacksonville has secured the location of what will be one of the largest cottonseed-oil mills in this section. The machinery to be used is of the very best and the latest design. The mill will be put in operation just as soon as possible, and farmers can find sale here for all the seed they have to sell. This mill will employ about twenty-five hands, and will be a valuable addition to Jacksonville. The mill will be operated under the corporate name of the Jacksonville Oil Mill Co."

A COLONY of Western people is to locate on the shore of the Mobile bay in Alabama and engage in manufacturing and agriculture. At first twenty-five families will form the colony, but it is to be increased to 100. The Henry George theory of land division is to be followed. A stock company with \$100,000 capital is to be formed. J. R. Clements, of Des Moines, is interested.

THE NICARAGUA CANAL.

Governor Black's Reply to a Letter in the Manufacturers' Record of September 28.

YORK, PA., October 1.

Editor Manufacturers' Record:

My attention has been called to the very admirable communication signed "An American" in last week's MANUFACTURERS' RECORD. I need hardly say that, interested deeply as I am in the subject-matter, I appreciate the excellent spirit, as well as the sound substance of the views there presented. The recital of history is to the best of my knowledge and belief unimpeachable, and the statement that the proposed construction of the Nicaragua Canal under protection of the general government has never hitherto been made a party question is beyond dispute. Right here, however, begins the slight and only difference I can perceive between my own views and those of the gentleman who so ably and fairly criticises my humble appeal to the communities most concerned to look after their manifest interests by requiring their representatives in Congress and in the administration to give them their support.

It is quite true that the canal has never been made a party question, and it is equally true that, with the masses of all parties and all sections favoring it, the canal has not only been built, but the subject, vital as it is, has been continuously shoved aside in Congress and elsewhere to make room for matters which were of a party nature. It has been perfunctorily endorsed by national conventions; it has been perfunctorily recommended by Presidents, and it has been perfunctorily brought forward in Congress and regularly set back to make room for something over which the parties were actually contending.

For this reason, and because I see no other way to accomplish the end, namely, the construction of the canal, I took the liberty of advising my party friends not in the South only, but all over the Union, to make it a party demand upon the government, whose political departments are at present in the hands of the democratic party. If your accomplished contributor will show me any better or surer method of proceeding I will promptly move over to his side and go with him as far as the farthest; but I fear he will find none. This government is administered by parties. The prospect of legislation upon any subject, no matter how vast its proportions or how clear its advantages, upon which the parties are either not interested or not pledged, is too small for the consideration of practical men. It is a pity it is so, but so it is.

Has your contributor, anxious friend of the canal project as he evidently is, any serious objection to the unanimous, earnest and active support of the great American waterway by the democratic party? Does he know any sound reason why the masses of that party in their conventions, in their legislatures and through all their organs, should not instruct their representatives in Congress and their present and future agents in executive power to forward the canal, and, if need be, pledge their candidates in advance to render this service to their country, or suffer the consequences of party treason at home? Would this advance or retard the measure? If he will reflect but a moment I think he will see that it is the only way by which we can arrive at the end we both desire. It is all I ask. I make my appeal to my own party. I do so not merely because I belong to it, and therefore have a right to participate in its councils, but because it is the party in power, and until a change takes place it is the only party which can carry the measure. Is it wrong to ask the democratic party to rise to the occasion? Is it low partisanship or is it honest patriotism to ask the party having the power to render a service

which our protesting friend says all the people favor without regard to section or politics, and which we agree is the greatest service this generation of men can render to our common country?

But the opportunity is open to the republican party as well. Some of its most illustrious leaders have pointed the way in terms which do them everlasting honor. Let the masses of the republican party, let their press North and West, accept the advice of such as Grant and Arthur and Harrison and Sherman, and let them also pledge their representatives, albeit for the present a helpless minority, to rival and to aid the national democracy in the consummation of this mighty national undertaking. Doubtless the friends of the canal would cheerfully welcome this generous competition, and with all parties thus in line there could be no doubt of the issue.

I imagine, however, for more reasons than one, that we must rely upon the democratic party for the construction of the Nicaragua Canal. If in 1896 that party should be voted down and out, having neglected its manifest duty and foregone its splendid opportunity, would any reasonable man conceive that the situation in regard to the canal had been improved? The republican party is sectional in fact and in spirit. It has, to say the least, not sought the material advantage of the Southern States as it has that of the Northern States. Its spirit is anything but friendly toward the States which would be most immediately and perhaps most largely benefited by the canal. It regards with jealousy the acquisition of new wealth, population and political power by that great and growing region which, in pure self-defence, has been and must remain for years to come solidly democratic. It was in full power for a quarter of a century, but it failed utterly to respond to the inspiration of Grant and Arthur, and the canal received no impetus at its hands. It even rejected the magnificent Frelinghuysen treaty with Nicaragua in a formal vote by a republican Senate! Can we expect of it better things in the future? I may be mistaken, and I hope I am. But I am sure your contributor will pardon me if I say again that the intelligent people of the Southern States, of the Pacific States and of the silver States, whose interests in this national project are at once so palpable and enormous, would feel that they had but a cold prospect of final success, if they found themselves dependent upon the naturally inimical and sectional republican party for the performance of this duty to the whole country.

On the other hand, the democratic party is in power. We have a right to ask it to do better than its narrow and sectional adversary, and we have a right to expect from its truly national and patriotic spirit, regardful alike of the best interests of all sections, a favorable response.

CHAUNCEY F. BLACK.

Brice-Thomas Interested.

A Velasco, Texas, dispatch announces that the Gulf, Colorado & Santa Fe may use that harbor when the ship-channel is deepened for one of its seaport terminals. It is stated that the Brice-Thomas syndicate now own most of the stock in the Velasco Improvement Co.

Newspaper Wanted.

An experienced journalist with some capital desires to secure control of or an interest in a daily paper in some progressive Southern city. A weekly on a paying basis in a flourishing community would also suit. Address W. J. C., care MANUFACTURERS' RECORD, Baltimore, Md.

Water Valley, Miss.—G. D. Able, mayor: "Things look more hopeful generally. Planters are less in debt, and the industrial outlook is better for our city."

SEVEN ACRES OF SHOPS.

The McShane Manufacturing Co., of Baltimore, to Build a New Plant.

Several months ago the MANUFACTURERS' RECORD published an article in which it was stated that several Baltimore manufacturers contemplated moving or had decided to move their plants just beyond the eastern city limits. Among them was mentioned the Henry McShane Manufacturing Co. The MANUFACTURERS' RECORD learns on the best authority that this corporation has secured the site for its works, and will build in the locality mentioned. It has bought about seventy acres of land on the Patapsco river, about two miles from the Maryland Steel Co.'s works at Sparrow's Point, and on the same side of the harbor. The property is known familiarly as the Maryland Central terminals, as it was intended to be the tidewater terminus of that railroad, which was to be widened to standard gage and extended through the eastern suburbs of Baltimore to this point. The financial troubles of the railroad company, however, placed the tract in the courts, and it was sold to the highest bidder. Parties acting for the McShane Company bid it in for \$18,000. It has 1200 feet of water front, and while there is no deep water close in shore, the bottom is sandy and a large ship channel can be dredged at a minimum of cost.

On this site the industries of the corporation will be centralized. They include the manufacture of iron pipe, brass fittings for plumbers and ornamental use, also bells. The latter is one of the special features. Bells of all sizes, from the largest church bells to peals and chimes, are cast at this plant and shipped all over the country. Among the buildings required will be a pipe foundry, a pattern shop, a brass foundry, bell foundry, finishing shop and a power-house in which will be located engines and boilers. A dynamo plant for auxiliary power and illuminating purposes may also be installed. An office building and several other structures will also be required, and it is estimated that fully seven acres will be used for the buildings alone. In addition to this, an extensive dock will be needed for loading and unloading vessels; also several railroad spurs to connect the place with the Baltimore & Ohio and Pennsylvania systems.

The cost of constructing and furnishing the works with apparatus is estimated at between \$1,000,000 and \$1,250,000. At present the company has a central plant located on North and Holliday streets, in Baltimore, which was appraised as worth \$800,000 a short time ago. Besides this, it has smaller works in East Baltimore. It is understood that work is to begin on the new plant early in 1895. The company's present capital is \$1,000,000.

THE Colombian International Colonization & Improvement Co., which intends establishing steamship lines between Mobile and New Orleans and British Columbia, has \$5,000,000 capital stock. It has purchased land in Colombia, and is cultivating fruit and coffee. The officers of the company are Charles I. Dick, president; Philip Thompson, director-general; Dr. Geo. P. P. David, secretary-general; E. R. Violett, of Atwood Violett & Co., cotton brokers, treasurer-general; E. P. Cottraux, director; W. F. Brewer, attorney-general.

THE Drummond Water & Canal Co., of Norfolk, Va., has negotiated a loan of \$1,200,000 with the Maryland Trust Co. of Baltimore. This money will be used in improving its canal.

A DISPATCH from Brunswick, Ga., states that P. D. Armour, the Chicago capitalist, is endeavoring to purchase Jekyll Island, near that city, and has offered \$1,000,000 for it.

The Manufacture of Coke.

[FOR MANUFACTURERS' RECORD.]

One of the most interesting papers read before the British Iron and Steel Institute at its recent meeting in Brussels was by R. de Soldenhoff upon the manufacture of coke. This subject is receiving more attention each year, especially on the Continent, where continued and highly successful efforts have been made in the direction of reducing cost by saving and utilizing products which in the United States are wasted. Thirty years ago the same extravagant system was followed in Great Britain, and even today there are many beehive ovens operating. The introduction of the Welsh, Coppee, Simon-Carves and Otto Hoffman ovens, however, have been steadily forcing cokemakers to adopt more economical methods so as to withstand competition.

Each year there is produced in the coke works of Great Britain about 9,750,000 tons of volatile matter, resulting from the carbonization of coal. In order to determine the value of this product in coal it is necessary to estimate the equivalent of the gases in coal and deduct from this the amount consumed in the actual process of coking. The remainder is the amount of fuel which can be used for other purposes, and its value is, therefore, easily determined.

Leistikow gives the following figures: 100 cubic metres equal to 3500 cubic feet, equal to 37.6 pounds weight of gas, taking 0.4 as specific density of the gas at 0° Centigrade and atmospheric pressure. This is equal as heating energy to 193 pounds of coal. Knowing that 37.6 of gas is equivalent to 193 pounds of coal as heating energy, one pound of gas equals 5.13 pounds of coal, and one ton of gas is equal to about five tons of coal. Consequently, 9,750,000 tons of gas equals about 50,000,000 tons of coal. In order to generate the gas out of a ton of coal, about one-fifth of the equivalent found in coal is required for the coking process itself, while the four-fifths are to be utilized, in the present state of the coking manufacture, for generating steam; the four-fifths give 7,800,000 tons of gas or their equivalent in coal of 40,000,000 tons.

Assuming that a pound of coal evaporates six pounds of water, in practice, there is evaporated 240,000,000 tons of water; and knowing also that thirty-six pounds of steam are required to produce one horsepower, it is seen that about 7,000,000 horsepower will require about 100,000 Lancashire boilers of seven feet four inches diameter, capable each of generating sixty horsepower. Roughly speaking, there are 2,000,000 coke ovens in Great Britain to generate this power, which would mean twenty coke ovens per each boiler. Knowing, on the other hand, that the greatest number of ovens used for heating a boiler is fifteen, the number of ovens required for heating the above number of boilers would be 1,500,000, so that, assuming there are 100,000 boilers heated by coke ovens, there would be half a million of ovens wasting

has been assumed that 100,000 Lancashire boilers are in operation in connection with coke ovens.

The various bi-product ovens which are in use each have certain advantages, and as a rule each is best adapted to certain kinds of coal. An oven which is proposed by the author is one in which the gases are not drawn direct from the oven, as in general practice, but from a flue situated in the top of the side wall of each side of the oven. This flue, by means of two dampers situated on each end of it, may be, at will, connected or disconnected from the flues situated inside of the side walls, so that when the two dampers are in their normal position the oven is working as a closed vessel, and the gases are drawn to the condensing plant at first. If, however, for any cause it is necessary to turn the oven into one working in the presence of the oxidizing atmosphere, the dampers are shifted and the burning gases are admitted into the side walls first, under the floor after, and ultimately into the main flue.

In Great Britain it is computed 35,000,000 tons of coal are made into coke. Therefore about 400,000 tons of sulphate of ammonia and about 900,000 tons of tar are lost to the community, according to Dr. Otto's estimate of 25.44 pounds sulphate of ammonia and 60.84 pounds tar per ton of coal. Putting the sulphate of ammonia at the present price of £10 10s. per ton, we get the value of £4,200,000. Deducting from this amount 33 per cent. for working expenses, it leaves as net value £2,800,000. Putting the value of tar at 32s. 6d. per ton, we obtain £1,462,500. Therefore we waste yearly £4,262,500.

Further, it is stated that after the condensation of gases, that is to say, extracting tar and ammonia and utilizing the heat required for the ovens, sufficient heating power is left in the gases to the extent of being able to evaporate not less than one ton of water per every ton of coal charged into the ovens, and by gases otherwise escaping. The heat required for coking purposes is the same here as what is wanted in ordinary coking. This is estimated to be equal to 1,950,000 tons of gas, or equal to 10,000,000 tons of coal. The gas efficiency here remains only very slightly altered, and we make out that the heating power of those gases is worth about £1,500,000. So that the total value of waste in this case will amount to £5,762,500.

There is very little doubt that the heating power of the gases of ordinary coking could be utilized in more than one way—for instance, for the destruction of solid sewerage—and in large mining centres, where the population is very dense, and where a large number of coking installations are in existence, the waste heat could be utilized for sanitary purposes. It is so much more important that the moisture in the solids, which carries a great deal of ammonia with it, could be collected and made into sulphate of ammonia and utilized for fertilizing purposes.

TABLE OF RESULTS OF COKE MADE IN BEEHIVE, WELSH AND COPPEE OVENS.

Where the coke comes from.	Volatile matter of the coal used Per cent.	Washed or not.	Ash in coke Per cent.	Class of oven in which coke made.	Density of coke, Per cent.
Durham.....	22	Washed.	9.37	Beehive.	1.25
Glamorgan Coal Co. (S. Wales), Llwynypia.	22	Washed.	4.55	Welsh (rectangular)	1.11
Glamorgan Coal Co. (S. Wales), Llwynypia.	22	Washed.	4.20	Coppee.	1.36
St. Helen's Colliery, Cumberland.....	40	Washed.	7.25	Coppee.	1.23

their gases, which would mean a waste of gas equal to one-fifth of the quantity to be utilized for heating purposes, and, expressing it in the equivalent of coal, would mean 10,000,000 tons of coal wasted yearly.

Expressing the value of gases utilized and wasted in money, and putting the price of three shillings per ton of coal, representing the equivalent of one-fifth of a ton of gas, the value of the gases that could be utilized is £5,000,000, and the value of gases wasted is £1,000,000. It

Large Land Sale.

A dispatch from Galveston, Texas, states that Hon. Thomas B. Bryan, of Chicago, is one of a syndicate which has purchased 4000 acres in the northern suburb, or what is termed North Galveston.

APPLICATION for a receiver to wind up the affairs of the Chesapeake Oil Co. was made in Circuit Court No. 2 at Baltimore last week by Pearre E. Crowl & Co., through their attorney, Thos. J. Pritchett.

RAILROAD NEWS.

[A complete record of all new railroad building in the South will be found in the Construction Department, on page 154.]

IMPORTANT RAILWAY DEAL.

The Hot Springs Road Bought by G. A. J. Milair—A Valuable Property.

An important railway purchase has just been made by G. A. J. Milair, president of the Southwestern Pacific Company. Thousands of travelers are familiar with the road running from Malvern, Ark., to Hot Springs. This road, while only twenty-two miles in length, is one of the best paying properties in the country. It absolutely controls the gorge of the Washita river, leading from the Ozark mountains up to the famous Hot Springs, and a determined struggle for a long period has been waged by capitalists to gain control of this coveted property, but it would seem that Mr. Milair has won the victory. As the negotiation was consummated in Chicago only a few days ago, it has been impossible to obtain exact figures, but it is supposed Mr. Milair paid over \$1,000,000 for the "Diamond Joe" road, as it is nicknamed in the Southwest. The earnings of this road are enormous, and the property, involving exclusive control of the entrance into the city of Hot Springs, as it does, would be a bargain at any price around the above-named figure.

It is known that President Milair and the capitalists who control the Southwestern Pacific Railway possess important interests in several Southwestern railway properties that are already, or are soon to be, placed on a sound financial basis. It is probable that it will be discovered that Mr. Milair at the right time will transfer his latest purchase to the Southwestern Pacific Company.

This company has recently become possessed of land interests in Arkansas and the Southwest unrivalled in timber and mineral wealth. One large tract in Arkansas that Mr. Milair and his friends have acquired for early development is richly endowed with extensive pineries, large areas of ash, oak, hickory, gum, cypress and holly, and contains vast natural deposits of valuable marls, chalks, fire-clay, kaolin, soapstone, slate, and white sand, invaluable in making glassware.

Certain portions of Arkansas are not surpassed by any section on this continent for healthfulness of climate, fertility of soil and the ease with which not only a livelihood, but competence and wealth may be acquired by the poor and industrious of any nationality.

It cannot longer be questioned that the stream of population and progress is turned toward the South, and more especially toward the Southwest. The State of Arkansas will be a great gainer from the spirit of restlessness and discontent extant today in the extreme eastern, northwestern and trans-Mississippi regions of the United States. The hundreds of canvas-covered wagons that in the past few months have, like ghosts, in continuous winding bands, passed eastward across the Missouri, will stop when Arkansas is reached. They will not come east of the Mississippi. Why should they? The woodman from the North will here find in the lumber belt the greatest number of varieties and the most perfect individuals in inexhaustible supply to be found in any American forests. The agriculturist will find most favorable conditions, and the ingenious and speculatively inclined will have presented to them abundant opportunities for new work and new wealth.

While the plan of the Southwestern Pacific Company has not yet been made public, there can be little doubt that the intention of Mr. Milair, who was formerly president of the Memphis, Little Rock & Indian Territory Railway Co., and who is thoroughly familiar with the Southwest, is to

populate and develop certain comparatively unknown sections of Arkansas, which, according to government surveys, are teeming with natural wealth, and need only the application of intelligence, capital and publicity to cause to become a land, if not literally of milk and honey, yet a land that in this practical age would surely suit the thousands seeking happy homes, amid affluent surroundings.

Georgia Southern & Florida Reorganization.

The reorganization committee of the Georgia Southern & Florida Railroad has completed its plan for the rehabilitation of the property. It provides for the purchase by the committee of the property at the approaching sale and the formation of a new corporation upon the following capitalization:

Four million dollars of first-mortgage 5 per cent. 30-year gold bonds.

Six thousand eight hundred and forty shares first-preferred 5 per cent. stock (par value) \$684,000.

Ten thousand one hundred and fifty-six shares second-preferred 5 per cent. stock (par value) \$1,015,600.

Forty thousand shares common stock (par value) \$4,000,000.

Of this it is proposed to issue for each bond which has been deposited with the committee \$1000 of first-mortgage 5 per cent. bond, 200 in first-preferred 5 per cent. stock, 180 in second-preferred 5 per cent. stock and 800 in common stock.

The first and second-preferred stocks are issued to represent the overdue coupons and the reduction of the rate of interest on the new bonds to 5 per cent. The remainder of the stock and bonds not issued to the bondholders represented by the committee to be placed in the treasury of the company and disposed of only as may be necessary for the discharge of existing obligations and in the acquisition of properties which will be of value to the system. The committee has decided to close the pool on the 15th day of October next. Up to that date the bonds may be deposited with the Mercantile Trust & Deposit Co. of Baltimore upon the payment of \$3.00 on each bond.

The committee are: H. P. Smart, of Savannah, chairman; Thomas B. Gresham, of Baltimore; D. U. Herrman, of New York; Wm. Checkley Shaw, secretary, of Baltimore; Charles Watkins, of Richmond, Va.; Henry Rice, of New York; Charles D. Fisher, of Baltimore.

Small, But It Pays Dividends.

The Moore County Railroad, in North Carolina, is a notable exception to many of the larger lines in the country. Although but seven and a-half miles long, it has paid its owners a substantial dividend regularly for several years. It was built through a heavily-timbered section, and passes through some tracts of very valuable land. The railroad company is now extending it five miles further into the timber country, and will probably largely increase its traffic, which is transferred to the Seaboard Air Line at Aberdeen, N. C. The prosperous condition of the road has been largely due to economical and judicious management and to the resources of the region in which it is located. W. B. Eekhout, of Aberdeen, is general manager, and C. D. Tarbell, of Southern Pines, one of its directors.

From Memphis to the Pacific.

The recent sale of \$1,000,000 of the Choctaw, Oklahoma & Gulf Railway bonds insures the completion of that line to the terminus originally intended. It is understood that this road will be a connection of the Little Rock & Memphis. The latter company now has a line between the points named, and it is learned intends to extend it from Little Rock to Wister Junction,

one of the terminal points of the Choctaw, Oklahoma & Gulf. The extension of the latter, which is guaranteed by the bond issue, is from South McAlester to Oklahoma City. It is intended also to build from El Reno to Albuquerque, N. M., where it would reach the Atchison, Topeka & Santa Fe. Thus a system would be created extending from Memphis to the Pacific coast via Little Rock, Wister Junction, El Reno and Albuquerque. The Atchison, Topeka & Santa Fe system has a route which is nearly an air line from the latter city to California. The projectors claim that the new line would be by far the shortest from the Mississippi river to the Pacific, and that nearly twenty-four hours' time could be saved by it over the present schedule. A glance at the map shows that it is much shorter than any other.

Southern Railway Bonds.

The Southern Railway Co., at its meeting in Richmond, decided to issue \$120,000,000 in 5 per cent. gold bonds on the former Terminal system, and \$4,500,000 on the East Tennessee, Virginia & Georgia, to refund all indebtedness. President Spencer states that \$6,000,000 will be spent for construction, such as sidings, new depots, new bridges and general maintenance of way.

Railroad Notes.

ONE of recent important improvements made by the Southern Railway Co. is the arrangement of its sleeping car service, which hitherto has terminated at Washington, through to New York. By this means Northern passengers can have transportation from the metropolis to the principal Southern points reached by the Southern system without changing cars.

THE report of the Southern Railway Co. for the month of July shows that the net earnings increased \$103,400 over July, 1893. Of this amount \$95,520 was due to a decrease in expenses alone, owing to the consolidation of the several companies in the old organization.

Complete and Ornate Offices.

The Mercantile Trust & Deposit Co. of Baltimore, which has achieved notable success in handling large Southern financial transactions, has been making some expensive improvements at its headquarters. The company occupies a building specially constructed for its use at the northeast corner of Calvert and German streets. The structure is a handsome edifice, and is fitted up in the most approved style. The improvements just finished add to its beauty, as well as greatly extending the company's facilities, giving a complete and ornate home. A new building has been erected adjoining the original structure, communication with which is secured through three large doorways. The dimensions of the new building are 32x100 feet, making the whole front on Calvert street seventy-two feet, and on German street 100 feet.

The new building contains a large number of additional rooms for use of the company's president and directors and safe-keepers, with special rooms reserved for ladies. There are also reception and consultation rooms and private apartments for the use of clients. The company's storage capacity for silver and other valuables has been greatly enlarged by new strong rooms in the basement.

The partitions are of richly-carved mahogany, furnished with cathedral glass in heavy copper frames. The walls are glazed and of light color. The building is thoroughly lighted throughout by windows in the front and rear, and by a large skylight in the ceiling. Burglar alarms and telephones have been put in all parts of the building, which is also supplied with gas and electric-lighting apparatus.

FINANCIAL NEWS.

New Financial Institutions.

It is understood that the bank J. F. Lewis, of Valdosta, Ga., contemplates organizing in Savannah will be a State institution with a capital stock of \$100,000.

The Sterling Building and Loan Association has been organized at Lynchburg, Va., with W. P. Roberts, president, and Richard Hancock, vice-president. The capital stock is to be not less than \$10,000 nor more than \$200,000. The association will begin business with a capital of \$25,000.

A State bank will be organized at Bardwell, Ky., with H. Fisher, president, and H. H. Loving, cashier. The capital stock will be \$18,000.

The New Orleans Debenture Redemption Co. of Louisiana, Limited, has been incorporated by W. H. Rogers, Gordon S. Orme, P. R. Hennessy and others at New Orleans, La. The capital stock is \$100,000.

The German-American Insurance Co. of Arkansas has been organized at Little Rock with J. H. McCarthy, president; George Reichardt, vice-president; C. F. Penzel, treasurer, and D. Raleigh, secretary. The capital stock is \$200,000.

New Bond and Stock Issues.

The city of Cuthbert, Ga., will receive bids until October 15 for \$50,000 of electric-light and water-works bonds of the denomination of \$1000 each, and bearing interest at 6 per cent. per annum, payable semi-annually. The assessed value of property in the city in 1893 was real, \$319,977.50; personal, \$220,056.75; total, \$540,034.25; estimated true valuation, \$1,080,068.50; bonded indebtedness, \$1000. Robert L. Moye, mayor, can be addressed.

The board of directors of the Atlanta Exposition has decided upon the idea of issuing bonds to the extent of \$300,000 to bear 6 per cent. interest. They will be a lien upon the gate receipts.

The Houston (Texas) Water Works Co. has retired its first and second-mortgage bonds by an issue of \$1,000,000 of new first-mortgage 50-year 6 per cent. bonds. The Atlantic Trust Co., of New York city, is trustee of the mortgage.

Garrett county, Md., will vote next month on a proposition to issue \$25,000 of school bonds.

A deed of trust has been executed by the Columbia Street Railway Co., of Washington, D. C., with the American Security & Trust Co. as trustee, to secure an issue of \$500,000 of 6 per cent. bonds. The bonds were sold to secure funds for changing the motive power to cable.

Interest and Dividends.

A dividend of 10 per cent. upon the balances due the creditors of the City Savings Bank, Chattanooga, Tenn., has been declared by G. H. Jarnagin, assignee.

A semi-annual dividend of 5 per cent. has been declared by the Merchants' Bank of Florence, Ala. Five per cent. was also added to its surplus.

The Old Town Bank of Baltimore has declared a semi-annual dividend of 5 per cent.

The Farmers' National Bank of Annapolis, Md., has declared a semi-annual dividend of 3 per cent.

The Atlantic & North Carolina Railroad Co. has declared a 2 per cent. dividend. This road extends from Goldsboro, N. C., to Morehead City, on the Atlantic coast, and is controlled by the State, which holds two-thirds of the stock.

E. S. JOHNSON, of Baltimore, has been elected president of the Citizens' National Bank of Washington, D. C., to succeed his brother, the late E. Kurtz Johnson. The capital stock is \$300,000, of which \$165,000 is held by the estate of E. Kurtz Johnson.

MECHANICAL.

A New Vertical Engine.

The large experience of the Ball Engine Co., of Erie, Pa., in building engines for driving electric stations has brought this concern in contact with probably every contingency in such work. It has designed a new vertical engine, which we illustrate, and in planning this engine has brought into play past experience, endeavoring to place itself in the position of the station owners and operators.

It was desired to arrange an engine whose structure should be of such a form that the main pieces would be absolutely rigid and indestructible, and while having this feature, allow ease of access for adjustment or removal of any part subject to wear. Besides covering these points, the aim was to produce an engine whose steam distribution would be symmetrical on both sides of the pistons, whether one, two, three or four were used; in other words, an independent valve motion for each and every cylinder employed, and each of those being a perfect engine in itself.

By reference to the cut it appears that the main proposition as to strength and indestructibility is covered in the symmetrical form of the upright housings, which are made to constitute one double housing by having one side of each planed and bolted together in the centre of the middle shaft bearing. This substantiality is still further increased by the operation of planing the bottom of both housings to one continuous flat surface, to meet the planed surface of the top of the single base plate, to which the bottoms of the housings are substantially bolted.

The introduction of the shaft into this engine is accomplished by arranging the shaft bearings in a large jaw cutting into one side of the housing deep enough to bring the centre of the shaft in a plane with the centre of the housing, finish spots being provided to meet correspondingly finished surfaces upon the cast-iron boxes.

These boxes consist of one lower, two quarter and one top box for each journal, and these are provided with removable Babbitt metal shells upon which the journals bear. These shaft-box jaws are, in turn, closed by the use of heavy struts or plates having on their inner faces a V-shaped tongue on each end which fits into a corresponding groove planed on each side of the jaws. These struts are fitted so that when bolted in solidly by the four bolts in each, the jaw is closed and completes the symmetrical strength of the four corners of each housing, each strut being fitted so that there can be neither contraction or extension of the outer end of the jaw.

Each housing is also pierced by the large rectangular opening on each side (shown covered by a door bolted on), as wide as the space between the inner edges of the struts, and extending both high and low enough to allow the cranks with their counterbalancing discs to pass. Hence, with shaft, boxes and struts in place close up to the engine, it is only necessary to put up and secure large doors, which, in turn, are provided with a small shutter-plate covering an opening large enough for the insertion of one's hand to feel the connecting-rod strap when engine is in motion, and the necessary wrenches to key up the crank boxes when so desired, while the adjustment of the journal boxes is accomplished by turning the three set-screws shown in each strut—the two in the centre reaching the quarter boxes, while the third one above operates either in or out a wedge which fills between the upper side of the jaw in housing and the top box, thus giving independent adjustment for three parts of each box, while the lower box is perfectly free to move at right angles to the axis of the shaft, thereby giving for all positions of

adjustment of the quarter boxes a full bearing for the shaft.

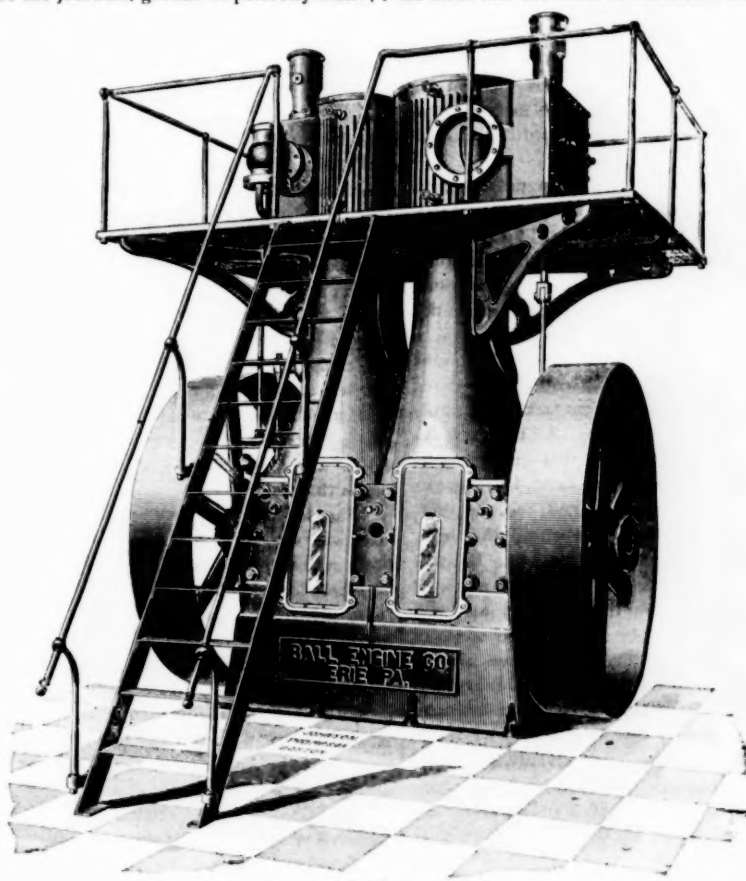
Above the openings for the shaft the housing becomes a round taper column, having on two sides of its inner surface the crosshead-guide surfaces, which are cast in place and bored out coincident with the boring and facing of the upper end for the reception of the cylinders and the lower end for its seat upon the base. The other two sides of each housing are pierced by elliptical openings, making easy access to the crosshead and upper end of connecting rod.

With all of the above in view, it seems that in adopting this form of housing a structure is obtained that is strong, convenient of access when desired, clean as to any dirt leaving the engine and closed as to any dirt from the outside entering the engine, along with a natural ventilation past the shaft boxes up the column and out of the elliptical openings therein.

The shaft is of one piece of forged steel from end to end, the crank-pins being 180 degrees apart and cut out of a solid down to their round diameter, and, as are the journals, ground to perfectly round,

Corliss engines; are provided with taper shoes to compensate for any wear that may occur against the guides, the shoes being of cast iron, with the running surface entirely covered with Babbitt metal, the area of which has been made exceedingly liberal. The piston rods are of crucible steel screwed into the crosshead. The stuffing boxes are adapted for the use of fibrous packing, unless otherwise ordered. The pistons are of the double-plate type, held up to a solid collar and tapered by a well-fitted nut. The piston packing is made up of two self-adjusting parted rings and a broad junk ring for centring and guiding the piston in the cylinder.

The cylinders are made of charcoal iron mixed in such proportion of hard and soft as to produce a strong close-grained iron, which enables the surfaces to take a mirror polish. They are provided with single valves, each of which is practically one piece so far as the motion and wear are concerned. The high-pressure valve is of the double-faced telescopic relief type, with boiler pressure on the, inside and a sufficient amount of unbalanced area being left on the faces that the force of the steam on the



A NEW VERTICAL ENGINE.

smooth-running surface. The pins are provided with centrifugal oiling holes in addition to the regular supply through the usual tube reaching from the upper to the lower end of connecting rod.

Covering each pair of crank-bells is a pair of discs carrying a sufficient amount of counter weight to give a perfect running balance to the cranks and the reciprocating parts, so that there is said to be practically no vibration to be communicated to the housings, and hence to the upper works of the engine. The connecting rods are of forged steel, the upper end being solid and cut out for the reception of the brass crosshead box and the removable crosshead pin, the latter being very carefully tapered through the crosshead and held in place by a fine-threaded nut; the lower end being provided with an excellent design of strap, which, owing to the arrangement of the bolts and cross keys, constitutes a solid end rod for the crank as well as the upper end, and both ends are provided with what is believed to be the very best arrangement of wedge adjustment, and which in operation does not alter the length of the rod.

The crossheads are of the double-plate pocket type, as used in many makes of

inside forces the two faces apart, causing, it is stated, each to rub against the seat with sufficient force to keep the surfaces polished and steam-tight throughout the entire life of the engine.

The low-pressure valve is of the common letter D type, with improved proportion and construction; is provided with a round relief area upon its back, operating against the chest cover, thus having a large, well-proportioned valve that is said to run with ease, and yet follow up its wear without attention from the outside.

In support of the main proposition contained in the production of this engine, the manufacturer states that "there is presented an indicator diagram, showing that where single valves of proper designs are used, the steam distribution can be made so perfect that it is simply folly to continue the chase after an ideal perfection that involves a vast amount of complication at an increase of first cost, maintenance and continuous attention, which is not justified by the results obtained.

"To state this in another way, the one great governing fact in the use of steam is recognized, namely, that a small leakage will more than destroy the useful effect of

very elaborately worked-out valves and motions. We have, therefore, confined ourselves to the work of perfecting and simplifying the simplest and best form of steam valve that is possible."

As an instance in point showing the control which a correctly-adjusted governor may have when such a governor has a good valve to handle, the following report we have received is presented:

"The engine is employed in electric railroad driving and is supplied with steam at 125 pounds gage pressure, and exhausts into a practically uniform vacuum of twenty-four inches, and was driving (at the time this test for total variation from standard speed was made) 425 to 435 indicated horse-power. To observe the variation, a tachometer was attached to the main shaft. When all was in readiness and the full load was on, the switch controlling the whole current leaving the station was opened, thus dropping the entire load instantly, and the engine made a momentary flutter up to 235 revolutions and back again to 233 revolutions. The circuit was kept open while the attendant counted ten, and was closed as suddenly as it had previously been opened, when the tachometer showed the engine making the same momentary flutter down to 231 revolutions and back again to 233 revolutions, taking up instantly a load of about 400 indicated horse-power. This test demonstrates that the governor was in absolutely isochronous adjustment; that the valves were absolutely steam tight, and that this degree of control over an engine of this magnitude, using such a pressure and discharging into a vacuum, has never been, and probably never will be, excelled."

This engine is guaranteed not to vary in speed from full load to no load, and vice versa, more than 1 per cent.; hence, as the test showed but eighty-six one-hundredths of 1 per cent., it was conceded that the guarantee was fulfilled in very good form. The governor is made of the best materials, the points of severe contact being provided with hardened pins and renewable soft bushings, thus throwing the wear into those parts that are easily and cheaply replaced.

The outward appearance of the engine is neat, symmetrical, and at once demonstrates that in this arrangement has accomplished a great saving of floor space required for this amount of power.

Steam; Its Generation and Use.

An encyclopedia of information about steam and steam boilers is contained in the twenty-eighth edition of "Steam; Its Generation and Use," issued by Babcock & Wilcox Co., 29 Cortlandt street, New York city. There is a chapter on economy and safety in steam generation offering some practical hints on the requirements of a perfect steam boiler, showing the causes of explosion and how to provide against them, the elements of safety in water-tube boilers, etc.

Interesting features are abstracts from lectures delivered at Cornell University and before the American Society of Mechanical Engineers on the theory of steam-making, theory of heat engines, circulation of water in steam boilers, and a brief history of water-tube boilers. A large amount of useful information is given in the shape of rules and practical data for securing the best service from boilers. A chapter on the evolution of the Babcock & Wilcox water-tube boiler shows the early types of this boiler, and sketches the various stages and vicissitudes passed through and overcome in perfecting the type of boiler which this company is now building. We understand that the company will send a copy of this book to anyone interested. It is well worth having for the practical information it gives, and will be found a handy reference book.

SOUTHERN TEXTILE INTERESTS.

[A complete record of new textile enterprises in the South will be found in the Construction Department, on pages 152 and 153.]

Fine Cotton Goods Must Be Made.

Mr. W. J. Kincaid, president of the two cotton mills at Griffin, Ga., in a recent interview published by an Atlanta paper reviewed the status of cotton manufacturing in the South and pointed out in an interesting manner changes that must come. His statements were those of a plain, practical business man who has thoroughly mastered the business and recognized every condition necessary for success. Mr. Kincaid said:

"There is but one trouble with the mill business in the South. They are all doing the same kind of work. They are all spinning and weaving the goods that can be made out of fourteen yarn. The result is that they may have flooded the market with that particular class of goods. I am not making any special complaint, because the trouble I am telling you about is natural, almost inevitable. It grows out of a lack of technical knowledge on the part of those who go into the mill business in the South. The process is sometimes like this:

"Brown, who is a good business man and somewhat ambitious, conceives the notion of helping himself and his community by starting a cotton factory. So he gets up the stock and has everything ready, and then he makes a visit to the nearest mill. He looks into it a little and then goes home and duplicates the plant. This is about the history of the cotton-mill business in the South."

"Doesn't this hurt some?" I asked.

"It has a tendency to hurt," replied Mr. Kincaid, "and will surely hurt if cotton manufacturing in the South is to be developed along the same old lines. The Southern mills have no competition in New England. They ran that out ten years ago. As a matter of fact, there is no line of cotton manufacturing the South may take up in which outside competition can stand against us.

"The cotton-manufacturing industry is in its babyhood in this section. We are just at the beginning of it. We have developed the little end of it almost too well. We have gone about as far as fourteen yarn will carry us. We have got to take hold of twenty-eight and thirty-two, and that means print cloths—calicoes—and bleached gingham. If I were twenty years younger I would go into the stripping-room—the room where the cotton is undressed—and I'd work my way through the mill. Why? Because when I came out I'd know all about the business. I'd have knowledge that could be turned into cold cash. I'd go into business that way because I know just as well as I know that I'm standing here that this Piedmont section—the upper part of Georgia, the upper part of South Carolina, and the upper part of North Carolina—is going to be the centre of the cotton manufacturing of the world. Every condition is here except that of technical knowledge, and that will not be wanting when the demand for it grows imperative.

"The time is ripe for the South to enter upon the manufacture of fine goods—print cloths and gingham. All the conditions call for it. There must be a change, and the men who inaugurate it will make millions. Every mill man in the South knows that the further development of cotton manufacturing in the South must proceed on different lines. We already manufacture all the lines of coarse goods. We control the market for these goods. We have run out all competition except amongst ourselves. But it must be clear that if we go on developing along these narrow lines, cotton manufacturing in the South must necessarily receive a backset.

"Now, I am not predicting that it will receive any such backset. I believe firmly that this section will soon enter upon the manufacture of the finest goods."

"But can we compete with New England in making these fine goods?" I asked.

"Let me tell you the advantages we have," said Mr. Kincaid. "In the first place, we have in the Piedmont section the finest climate in the world—no extremes of heat or cold. We have a class of people here that make the finest mill operatives to be found anywhere—sober, steady, industrious, with no tendency toward strikes. We are right in the midst of the cotton plantations, and we can buy a better factory plant today, with more improvements, for less money than any they have in New England. In other words, we can get better mill equipments than those in the New England mills for less money. That is an advantage that is bound to tell. Then we have the advantage of cheaper cotton. Roughly speaking, I can get cotton at my mill down here for a cent a pound less than New England can get it. That is \$5.00 a bale. I use 4000 bales, and therefore I have an advantage of \$20,000 in the year's output. How can such a handicap as that be overcome?

"When and where the manufacture of fine goods in the South is to begin, I can't tell you. If I were younger I'd go into the business without hesitation. But in order to manufacture prints and gingham and canton flannels, we must have print works and bleacheries.

"I know all the objections. I have raveled and unraveled them a thousand times in my mind. There is no lacking of capital and enterprise here. All that is lacking is skilled labor, and that will be forthcoming wherever the demand for it grows importunate. I understand, too, that cotton manufacturing in this country has been of slow and continuous growth. But this means that those who go into it now will not have to solve the thousand and one problems that were necessary to solve in the beginning. Today we have all the advantages that improved machinery can give, and there is nothing to do but seize the opportunity that is offered. Quite recently a loom has been invented that will work something like a revolution in weaving. One experienced hand can manage twelve of them, whereas a hand can only manage six at present, and he must be an expert operative to do that."

Speculative and Statistical Features of Cotton.

Some interesting facts about cotton, statistically and speculatively, are given in the cotton circular of Atwood Violett & Co., of New York city. We make the following extracts:

"America contributes 65 per cent. at least of the raw material which enters into the world's manufacture of cotton goods. Since 1890 there have been four American crops, averaging about 8,000,000 bales each.

"The growing crop of the season beginning September 1, 1894, is estimated at 9,000,000 bales, and, perhaps, largest ever grown, the maximum heretofore marketed having been 9,035,000 bales.

"The exports to Europe and elsewhere for the twelve months of the cotton year ending August 31 last were 5,222,000 bales. Estimating them at 5,500,000 for the current year, it means, at six cents per pound or \$30.00 per bale, the sum of \$165,000,000 of gold imports in payment of same, and but for the expectation of this in the near future, the government supply of gold, as well as that of the banks in America, which was so very much reduced

several months ago, might have been even more seriously depleted during the past summer than it was.

"These figures indicate the importance of the cotton crop in assisting to protect the national credit.

"The world's yearly consumption of American cotton is now estimated at about 8,000,000 bales. Therefore, a 9,000,000 crop plus 1,589,000 of American, brought over on September 1, 1894, from the previous cotton year, will have to supply not only what the world consumes of it, but, in addition, must protect the short interest in New York, New Orleans and Liverpool markets.

"From this probable total supply of American, however, of say 10,600,000 bales, at least 1,500,000 will be carried over on September 1 next year into a new cotton season, thus leaving 9,100,000 as the available supply for all purposes for the twelve months ending August 31 next, provided the crop now being marketed realizes 9,000,000, but with a crop larger than that figure the supply will be, of course, that much greater.

"The lowest price at which middling cotton ever sold in this country was at New Orleans in 1843, namely, four and a half cents per pound, and the average price of middling at New York for the same season was 7.25 cents. The population, white and black, in that year was about 18,750,000 (allowing 10 per cent. increase on the census figures of 1840), against 70,000,000 now, and the cotton crop of the same season was 2,379,000, against a probable 9,000,000.

"But while the production of American cotton has very largely increased, so has the world's population, especially in America, and therefore of consumption. The increase of each we call attention to above.

"A most important matter, however, is the greater increase of the buying power now of the world, particularly in America, per capita than in 1843.

"The lowest price until now since the civil war was in March, 1892, when middling cotton sold at New Orleans at six and a-quarter cents, while today it is quoted there at five and thirteen-sixteenths, which means five cents to the planter, a price at which it is impossible to produce cotton, except at a loss, and unless there is a very material improvement from the present level, it means a serious curtailment of the acreage of the cotton-producing States next season.

"Omitting the gold-premium years after the civil war, when the prices were fifty to sixty cents, the highest since that period at New Orleans was thirteen and one-eighth. June contracts sold in the New York market at fourteen cents in 1879, while June here today is 6 50, against 8.54 cents same date last year.

"A warehouse receipt or bill of lading for a bale of cotton is a bankable collateral and bill of exchange throughout the world, taking the prices of middling cotton at New York or New Orleans at any time as a lending or borrowing basis, and its quality never deteriorates when in warehouse, as a well-authenticated case at Liverpool of more than thirty years clearly proves two recommendations, which, perhaps, cannot be said of any other agricultural commodity dealt in speculatively.

"Compared to grain crops in America, that of cotton is very small, and, therefore, statistical information is more accessible and accurate, in evidence of which the amount of cotton coming into sight daily is known to a bale, almost, while once weekly the world's visible supply is given with similar accuracy by the New York Financial Chronicle and the New Orleans Cotton Exchange.

"Its supply is relatively small, considering its consumptive requirements, and because of its protecting a short interest, which the greater part of the year is very large,

whether speculative or otherwise, while the proportion used of American to the total of all kinds consumed is likely to continue to increase yearly.

"If prices were three or four cents per pound higher than they are, this disparity between the sales and supply would be most pronounced; but with middling selling at New Orleans today at one and five-sixteenths cents higher only than it was fifty-one years ago, it would seem to offer an inducement to buy actual cotton and hold it, as well as contracts, just as one would purchase a piece of real estate or any other character of property that might have inherent strength, present or prospective."

A Sample Southern Cotton Mill.

One of the most noted of the Southern cotton mills is that at Newberry, S. C. Work was begun on this plant in 1882, and it began operation two years later. At first it consisted of a main building 102x203 feet, with two wings each 102x45 feet, the material being brick and stone, all from the vicinity. This plant was large enough to contain 370 looms and 10,880 spindles, worked by 370 people. The output annually is 6,300,000 yards of material. In the ten years since it started the mill has proved so prosperous that another of a larger size is to be built on the company's property. The extension consists of a three-story brick building (made of native brick) 100x211 feet, with two wings 102x55 feet. About 15,000 new spindles and 500 looms will be added. That will give employment to at least 325 more operatives. The mill is equipped with all the latest improved machinery, modern appliances and fire extinguishers. The addition is being made partly from the earnings of the mill and partly from an increase of capital stock, \$150,000 having been recently added. The stock sells for \$110 per share.

The company owns 204 acres of land, on which are located the mill and factory village. The cottages are all arranged for the comfort and convenience of the operatives, and are rented to them for a small rental, which is paid on each settling day. The operatives are paid in cash every two weeks, and spend their money where and as they please. The annual pay-roll amounts to \$57,000. The mill declares a semi-annual dividend of 4 per cent. on the stock. This is one of the many mills in the State that is owned by home capital. A majority of the stock was taken in the county. This is but one of many instances where Southern cotton mills have yielded profits enough to pay for their enlargement in addition to earning dividends of 6 per cent. and upwards annually. A better argument for the investment of capital in Southern manufacturing enterprises could not be advanced. Unfortunately, a feeling still exists in some sections of the North, but very few, that the Southern people are yet hostile to the settlement of Northern investors in their midst.

In this connection the following letter from James C. Longstreet, of Grenada, Miss., to the Boston Post will be read with interest:

"The spirit of the Southern people is most favorable to the beginning of investments. Instead of meeting with a hostile and obstructive feeling, the Northern manufacturer will meet with a warm, helpful welcome. The South longs for an industrial and commercial development in some degree equal to its needs, its demands and its possibilities. The man or men who may come bearing honest and substantial gifts to her will meet with a genuine friendliness, a hearty co operation and a warm gratitude.

"The legislation of the Southern States, instead of being in any degree antagonistic to industrial investments, as a general thing is specially designed and intended to encourage and foster them. In this, my own State of Mississippi, the law exempts

such factories from State, county and municipal taxation for a period of ten years. This is but one instance of the favoring legislation. The labor of the South used in the factories is fully equal in capacity and industry to that of the North, as instance the product of the splendid cotton-manufacturing plant at Wesson, in this State, and it is quiet, peaceable and faithful.

"The proximity of Southern mills to the cotton-fields is a great advantage. By the logic of a stern and increasing necessity, the factories and the producers must be brought closer together, in order that each may share in the outlay now made to middlemen. We of this section need and desire a manufactory at this point, Grenada, on the Talobusha river, and investors are cordially invited to examine our fine advantages of location, railways, waterways and cotton production, and to visit our people."

Increasing Consumption of Cotton in Japan Emphasizing the Need of the Nicaragua Canal.

The British consul at Tokio, Japan, in discussing the growing cotton-manufacturing interests of that country, reports that the aggregate number of spindles in one of the mills is over 30,500, with a producing capacity of 23,000 cattiees (30,130 pounds) per twenty-four hours. The number of men employed is 2100 and of women 3700. They work twelve hours, allowing forty minutes for meals and fifteen minutes to change their dresses. At nearly all the mills in the empire the mills work both day and night. At Kangstuchi mills the laborers take turns each week, first on the day and then on the night shift. The wages of the women range from four and a-half to nineteen sen (four to seventeen cents) per day, the average being about eight sen (seven cents). The Japanese are rapidly adding to their spinning capacity, ordering new machinery and enlarging their factories, so in time, and that, perhaps, not very far distant, they will take an important place in the manufacture of cotton goods.

This merely emphasizes the necessity for the South to secure more ready entrance to the Japanese market for its cotton. If the Nicaragua Canal were open Southern cotton could and would be delivered in Japan in large quantities, as the Japanese cotton is short staple, and the Egyptian cotton, which is secured as a mixer, is long staple and of a poor color. But little Indian cotton is purchased, as the mills in that country are rapidly extending their trade and absorb nearly all the product not sent to England or France. The Southern cotton is preferred by the Japanese to any other kind, as it is of good staple, has little or no color and works better in the machines than any other which they can secure.

Cotton Conditions.

The Jerome Hill Cotton Co., of St. Louis, Mo., in its weekly circular summarizes cotton conditions as follows: "We have held and still hold that the financial, commercial and agricultural conditions of the Southern States at this time are in a healthy and improving condition. But the very low values which have been made for raw cotton, and the unjustifiable values being forced for cottonseed by the cottonseed trust, are today a matter of very serious consideration and well deserve the immediate attention of Southern bankers, merchants and farmers. 6,000,000 bales cotton a few years ago netted the farmer \$300,000,000; 7,500,000 today will only net \$225,000,000. Cottonseed was worth from \$14.00 to \$16.00 per ton; the same seed today is selling for \$6.00 to \$8.00 per ton.

"There is a cause for this state of affairs which is not justified by supply and demand or the laws governing commerce. Parties who were bulls on cotton two years ago at ten cents are now the most anxious and

frightened sellers at five to six cents. A stampede is made to throw their cotton overboard. All reason and past precedents are abandoned and forgotten, and to the great joy of a lot of manipulating, intriguing consumers across the sea and their paid agents in this country, who have been enabled to put forth unreasonable assertions which are accepted as facts as to the crop, and the South is the sufferer from it. The crop has been undoubtedly overestimated.

"Trade is improving in every country, and the low values of cotton should increase its consumption. So we advise our friends South to stop and think. They must act for themselves and stop this unreasonable and unjustifiable giving away of their crop.

"The last three crops of cotton have not exceeded the world's estimated wants. Therefore there is not an overproduction, and to men of means who have both the ability and courage an opportunity is now offered such as rarely occurs for a safe and profitable investment in raw cotton which will not deteriorate with age or go out of use."

Charlotte After Finishing Works.

The need of bleachery and finishing works has been seriously discussed for some time at the Manufacturers' Club, Charlotte, N. C., and some practical steps towards securing such plants are likely to be the outcome. Charlotte is the central point for a large number of cotton mills, and the growth of cotton-manufacturing in this region is rapidly increasing. At present goods are sent to New England to be finished, requiring reshipment to the markets. It is said that several Northern men operating similar establishments have discussed the location of such works in Charlotte. It is expected that, unless some outside parties establish bleachery and finishing works, the cotton-mill men will join together and build them.

A 40,000-Spindle Mill.

The sale of the Saluda factory property, including water-power in Lexington county, S. C., and near Columbia, S. C., is reported to have been made to capitalists who will build a 40,000-spindle cotton mill. W. H. Chew, who negotiated the sale of the Columbia Canal, which was followed by the erection of the big cotton-duck mill by the Columbia Mills Co., is said to have effected the sale of the Saluda property. The purchasers are given as Northern parties, some of whom are identified with the Columbia Mills Co. The information is to the effect that the purchasers will build a new cotton mill as soon as possible, and a new dam is to be constructed.

Another Cotton Mill to Go South.

The Toledo (Ohio) Cotton Mill Co. has decided to move its plant into a Southern State, and is now negotiating with the Commercial Club of Waco, Texas, to place its mill in that city. It employs 100 hands and has 5000 spindles. T. H. Dodge is secretary of the company.

Textile Notes.

THE Charlottesvill (Va.) Woolen Mills is kept busy now filling orders for school uniforms.

THE work of bricklaying on the new addition to the Pineville (N. C.) Cotton Mill will shortly begin.

A COTTON-BATTING FACTORY will be added to the plant of the Charlotte (N. C.) Oil & Fertilizer Co., of which Frederick Oliver is manager.

THE Vance Cotton Mills at Salisbury, N. C., will shortly put on a double force of hands and the plant will run day and night. Orders in hand will keep the mills busy for the balance of the year. R. G. Campbell is superintendent.

At the annual meeting of the stockholders of the Rome (Ga.) Cotton Factory

the following officers were re-elected: President, Henry Harvey; vice-president, J. J. M. Moore; superintendent, C. E. McLin. The plant made an excellent showing during the past year.

THE mill of the Dartmouth Spinning Co., at Augusta, Ga., has resumed operations, after being thoroughly renovated. This was the only plant at Augusta that shut down during the depression. Its suspension was due, however, more to legal complications than to lack of business.

THE stockholders of the Huntsville (Ala.) Cotton Mills have elected S. H. Moore, president; R. E. Spraggins, vice-president; Luke Matthews, treasurer, and J. Robert Jones, secretary. Directors were elected as follows: S. H. Moore, R. E. Spraggins, J. R. Jones, Luke Matthews, W. W. Garth, R. L. Pulley, A. S. Fletcher, W. M. Holding and J. M. Harris.

MR. T. PINKNEY LOWMEDES, of Charleston, S. C., who is placing stock for a new mill to be built at Rock Hill, S. C., to be operated by the same management as the Rock Hill Cotton Mill, is exhibiting samples of the line of goods to be made. They include gingham of dainty patterns and variety of shades, fine doilies, Turkish and honey-comb towels and coarse shepherd plaids.

A TWO STORY brick addition 50x128 feet is being built to the Crown Cotton Mills, at Dalton, Ga. The extension will double the capacity of the mills. The machinery of the plant was originally installed with the view of doubling the capacity. The product of this mill is cotton duck. It has forty-four cards, 176 looms and 4500 spindles. T. R. Jones is president; George W. Hamilton, secretary and treasurer, and J. W. Brown, superintendent.

THE Observer, of Charlotte, N. C., referring to the failure of the cotton-mill company started at Denison some years ago, notwithstanding the cheapness of coal and the abundance of cotton, says: "The reason why north Texas is not a good place to manufacture cotton is that Choctaw Indian girls don't make good cotton factory hands, and when white girls are imported to Texas from North Carolina or from New England the cow-boys marry them in about a week to a month after they land there to such an extent that the cotton-mill owner becomes discouraged and quits." We are afraid the Observer is too facetious. Possibly the cow-boys do marry all the girls that locate in Denison, but the Denison Cotton Mill failed before it was completed and has never been in operation.

Savannah, Ga.—J. L. Whatley, president of the Southern Land & Improvement Co.: "The outlook for business in this section is good. The farmers are in better condition than they have been since the war and the crops unusually good. Our merchants here are hopeful, and say the improvement is marked since the adjournment of Congress."

Orange, Texas.—Lutcher & Moore Lumber Co.: "The outlook for business is very good, but we have so many hungry lumbermen, hungry for business, that it will be some time before there is anything made; the little mills are no more to blame than the larger ones."

Wilson, N. C.—J. F. Farmer: "I think the outlook for business this fall and winter is fair. Crops generally are good, but prices are low, the best feature being the fact that (as I believe) our people are clearer of debt than for the past twenty years."

Columbia, Texas.—Brazos Manufacturing Co.: "Business outlook somewhat gloomy, excessive rains having damaged crops very materially, though the country is well able to tide over an entire failure of crops."

Pensacola, Fla.—E. E. Saunders & Co.: "Outlook for winter business very good."

COTTONSEED OIL.

This department is open for the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

The Markets for Cottonseed Products.

NEW YORK, October 2.

The weakening tendency of prices noted in our last has resulted in a material decline here, as well as at the South. With the break in lard prices, Western buyers have reduced their bids, and since they were the only support to the market, the market has dropped to about 24 cents for loose prime crude oil at the mills. There is but little demand at present, but with a settling down of prices a fair business would undoubtedly result. We learn that the quality of the new product is improving, and believe it will continue to improve, as the weather the past week, aside from rains in parts of Texas and along the coast of the Atlantic States, has been favorable for cotton-picking. We quote for barreled oils on the spot: Prime crude oil, 29 to 30 cents; off crude, 29 cents; prime summer yellow, 33 to 34 cents; off summer yellow, 32 to 33 cents; prime summer white, 40 cents; cottonseed soap stock, 1 1/2 to 1 1/2 cents. Cottonseed meal is dull, with slow demand, at \$21.00 per 2000 pounds ex dock for October-November delivery.

ELBERT & GARDNER.

Cottonseed-Oil Notes.

THE British steamship White Jacket was loading at Velasco, Texas, on the 27th ult. with cottonseed products for Germany.

THE cottonseed-oil mill at Sulphur Springs, Hopkins county, Texas, is running on full time. The price of seed is \$8.00 per ton.

THE cottonseed-oil mill at Greenville, S. C., is now running on full time. The old stock of seed is being fast worked up, and the new seed coming in, for which \$10.00 per ton is paid.

MAJ. W. C. POWELL, president of the Powell Oil Mill Co., at Bastrop, Texas, states that the cottonseed business has not been materially affected by the recent action against the alleged cotton trust.

THE gin of Wylie & Lokey, two miles west of Floyd, Hunt county, Texas, was burned on the 27th ult. A large amount of cottonseed and other property was destroyed. There was no insurance.

AT Frost, Navarro county, Texas, cottonseed has been selling from \$8.00 to \$9.25 per ton since the commencement of the season. About 2500 bales of cotton have already been marketed at this point.

THE Corsicana Cotton Oil Co., of Corsicana, Texas, will add a new department to its plant in the shape of a barrel factory. The new factory will be located near the oil mills, and will be fitted up with all the latest and most approved machinery.

MESSRS. ANTHONY & YOUNG, of Charlotte, N. C., are erecting a cottonseed house just south of their plant. The scales, which will be manufactured by the Standard Scales Co., of Rome, Ga., will be put in by the Charlotte Oil & Fertilizer Co.

THE Terrell Oil Mill, at Terrell, Texas, said to be an independent plant, is running on full time. Foreign stock in this mill has been bought by the resident stockholders, so that the plant is strictly a local enterprise and is paying better than in any previous year.

THE cottonseed-oil market at Houston, Texas, was reported easy on the 30th ult. The best bid for oil was twenty-three cents. Mills are offering more freely, but buyers and sellers are still apart in their views, as stocks are accumulating. Linsed oil was up one cent, and turpentine off one cent.

A MEETING of cotton-oil manufacturers

was held in Columbia, S. C., last week. The object of the conference could not be ascertained, but it is understood that the various managers of the mills met for the purpose of discussing the outlook for the cotton-oil business during the season just opened.

THE Interstate Transportation Co., of New Orleans, sent the towboat Henry Marx and barges on Saturday last to the bends on the first trip of the season. She will take cottonseed and other freights for the Union Oil Co. The steamer J. T. Jackson will follow the Marx, and it is expected that the receipts of cottonseed and other cotton products will be quite liberal in future during the season.

THE large cottonseed warehouse of the Planters' Oil Co., at Weatherford, Texas, was burned on the 27th ult. with about \$500 worth of seed. All the machinery used in handling the seed was destroyed. The warehouse and machinery were insured. The fire resulted in about a \$6500 loss, on which there was \$4800 insurance. The oil mill company will immediately rebuild the seed warehouse and will begin operations again in a very short time.

A DISPATCH to the Atlanta Constitution says: "A new enterprise for Jacksonville, Ala., has been secured, and one of the largest cottonseed-oil mills in that section will be put in operation as soon as possible. The mill will employ about twenty-five hands, and will be operated under the corporate name of the Jacksonville Oil Mill Co. The officers are as follows: President and general manager, V. H. Marshall; secretary and treasurer, George P. Ide; directors, Charles E. Pearce, of Ohio; P. Rowan, Judge E. F. Crook, S. D. G. Brothers, V. H. Marshall and George P. Ide."

REPORTS to the State Department at Washington, D. C., from several European countries indicate that a market for American cottonseed may possibly be established abroad if the proper steps are taken. The reports received from the various consular agents in the United Kingdom and Continent of Europe in regard to the extent of the cottonseed industry are of an interesting character. Among the reports received is one from Consul Lorin A. Lathrop, at Bristol, England. He says: "More than three-fourths of all the mills in England are in Hull and its neighborhood. They obtain almost their entire supply of seed from Egypt, and from 15,000 to 20,000 tons are annually imported into the Bristol district. The Egyptian seed is quoted today at £5 10s. (\$26.75) per ton spot, and £5 15s. (\$27.96) two months forward. Egyptian cottonseed comes unmixed with fragments of cotton fibre, and is therefore easier to handle than the American seed. The seeds are crushed undecorticated, and the oilcake has not, therefore, the excellent appearance of the American cake made from the decorticated seed. The oil expressed from the seeds finds a market in the soap factories, in the fish-frying shops and in the Mediterranean. It is stated that the industry in France is limited to one large cottonseed-oil mill, located at Marseilles, which is well equipped and transacts business similar to large American concerns. In Germany the cottonseed-oil industry is of little importance, it being demonstrated that a raw material as bulky as cottonseed could not be imported and oil manufactured at a net cost to withstand the competition of the abundant supply of high-grade oils which are produced and offered so cheaply in the United States."

THE cottonseed industry in Texas is at present considerably deranged on account of the attitude of cotton-oil producers towards the farmers of the State. The prices paid for cottonseed now range from \$7.00 to \$9.00 per ton, and much of the seed is in poor condition on account of dampness. Farmers in many sections are

holding meetings and discussing the so-called trust or combine said to exist among oil producers to depress the price of cottonseed. Resolutions condemning the action of cotton-oil producers have been adopted at the various meetings, and in some cases recommend holding their seed for a higher price, while in other cases conferences with stockholders of several mills have been held which may result in a standard price being agreed upon. The action of the State authorities against the various cotton mills is being vigorously pushed, and will likely be defended with the same spirit on the part of the oil mills. The injunction granted by Judge Scott in the suit filed by Attorney-General Culberson to dissolve the alleged cottonseed trust has been served on a number of the cotton-oil mills. Copies of the citation and injunction have been served on the Hillsboro Oil Co., the Itasca Cotton Oil Mills, Planters' Oil Co. of Weatherford, Milam Oil Mill, Rockdale Oil Mill Co., Brenham Compress, Oil & Manufacturing Co., Crocker Oil Mill and others of the eighty private corporations styled defendants in the case. Mr. R. K. Erwin, secretary of the executive committee of the Texas Cottonseed Crushers' Association, has issued the following circular to members of that organization: "Owing to the institution of the suit at Waco of the State of Texas versus the Texas Cottonseed Crushers' Association and quite a number of mills, it is necessary that the oil men meet with the view of arranging to take joint action in the defense of said suit." Pursuant to this circular a meeting was held in Dallas on Monday last, there being present representatives of the various mills in the State, at which matters relating to the suit brought by the State were discussed. The crushers' association has obtained the opinion of the most prominent lawyers of the State, and believe their case is a good one. Mr. Henry L. Scales, of Corsicana, secretary and general manager of the Corsicana Oil Co., in an interview says: "There is no cottonseed trust in this State. There is a Texas Cottonseed Crushers' Association, but the same is legitimate under the laws of Texas. It does not control or regulate the price of cottonseed. There is not now or has there been this season a dollar's forfeit put up by anybody for the purpose of regulating the price of cottonseed. Each oil mill is buying seed independently for itself, and is under no obligation to anyone as to whether it will pay \$1.00 or \$20.00 per ton for cottonseed. There has not been uniformity of prices of cottonseed in Texas, as has been advertised, as the books of any oil mill will show prices at nearly all stations have varied." The opinion of many in this State is that the trust law is not applicable to trusts or combines until after products have passed from the hands of producers, and that if the crushers' association has formed a price on seed, that its defense would be upon this point.

Life of General Lee.

In Appleton's series of "Great Commanders" the latest issue is "General Lee," by his nephew, Gen. Fitzhugh Lee. It is needless to say that a life of General Lee by one so intimately associated with him will be welcomed with almost equal heartiness by all sections. General Lee is no longer regarded only as the great Confederate general to be almost idolatrously worshipped by the South, but one of the world's great generals—an American whose marvelous military genius evokes the unstinted praise of every true American, and whose perfect character as a Christian gentleman grows upon the world as his life is more fully studied. Gen. Fitzhugh Lee has done a public service in giving to the world this admirable work. It is published by Messrs. D. Appleton & Co., New York; price \$1.50.

PHOSPHATES.

TENNESSEE PHOSPHATES.

An Expert Opinion on Their Character, Extent and Commercial Value.

Regarding the Tennessee phosphate beds, the following letter from a well-known expert mining engineer, one of the accepted authorities of the country on phosphates, who has thoroughly examined every point where the phosphate has been extracted, is published by the MANUFACTURERS' RECORD:

NASHVILLE, TENN., September 20.

There are at present three companies engaged in the active development of these deposits, the Duck River Phosphate Co., the Southwestern Phosphate Co., both Nashville enterprises, and the Tennessee Phosphate Co., a Baltimore undertaking. The amount of rock shipped up to date is 4300 tons, the shipments being made to Nashville, Atlanta, Montgomery and New Orleans, with a few sample cars to Baltimore. The bulk of the shipments have been made by the Duck River and Southwestern Companies, the Duck River Company being the heaviest shipper. The Duck River Phosphate Co.'s mines are located at Totties Bend, Hickman county, nine miles northeast of Centerville, the nearest railroad point, to which place its rock is now being hauled in wagons at the rate of 100 tons per day. At these mines the greatest amount and most intelligent development work are observed, the outcropping of the vein being stripped off for several hundred yards, developing an extremely regular vein averaging thirty-six inches in thickness. The vein, after being stripped back to a depth of twenty feet, will be mined by drifting. The Southwestern Company's mines are located on Falls branch, in Hickman county, their nearest railroad point being Etna Station, distant five miles, from which place the company is shipping. The developments on this property show up extensive veins of phosphate rock averaging thirty inches in thickness. Much of this rock can be mined by stripping. The company is now erecting a crusher at the mouth of Falls branch, which will have capacity of twenty tons per hour. This is a decided improvement over the present method used by all the companies, of breaking the rock by hand to sizes three to four inches in diameter at a cost of twenty-five cents per ton. The Tennessee Phosphate Co. is developing its Nunn property on Swan creek, Hickman county, four miles from Etna Station. The vein on this property shows up from fifteen to twenty inches in thickness, but is more broken and irregular than the Totties Bend and Falls branch veins. At its Mayfield property, on upper Swan creek, Lewis county, some slight prospecting work has been done and a 12-mile line of railroad surveyed, but no actual mining is in progress. As in every new mining field, the promoter and speculator are at work taking options, but the above companies are the only ones that have so far materialized.

The grade of the rock so far mined and shipped runs about as follows:

Bone phosphate.....	65 to 70 per cent.
Alumina.....	trace to 2 per cent.
Iron oxide.....	1 to 2 50 per cent
Iron combined as pyrite.....	2 to 5 per cent.

It is still an open question as to the action the iron in form of pyrite (Fe S₂) will have in reverting the phosphoric acid. There is much to be said on both sides of the question. Theoretically, it should not cause reversion. However, in these cases reasoning from formula will not answer, and we must await the actual tests in the factory on a large scale to settle this very important point.

Regarding the market, the present low prices and generally depressed condition of the trade is unquestionably due to the fact that the production of crude phosphates is

fully equal to, if not in excess of the consumption; and if the Florida, South Carolina, French and Belgium mines were to produce to their full capacities, the supply of crude rock would be considerably in excess of the consumption. In addition to this we have the Algerian phosphates to face, which will undoubtedly play some part in supplying the European market; and even should their mining prove a failure, yet the very uncertainty of the case would prove a disturbing element in the market. In this country we have these new Tennessee deposits, and although it is not possible for them to cut any figure in the European or Eastern markets, yet from their very location they must take much of the interior trade, cause another disturbing factor and tend to keep down prices. Phosphate rock is not like sugar or some ordinary article of daily consumption. When the price of sugar falls, immediately the consumption of sugar increases, but with phosphate rock the superphosphate manufacturer has acid chambers that by the laws of chemistry can only produce so many tons of acid, and consequently he can only consume a fixed quantity of crude phosphate. To increase his consuming capacity he must build additional acid chambers and otherwise enlarge his plant. This means the outlay of much capital, and even should he do this the quantity of material he can sell is necessarily limited; consequently, after a manufacturer has purchased his supply of phosphate rock, it is no inducement for him to buy if cheaper rock is offered, as he cannot consume it. Low prices do not, therefore, necessarily increase the consumption of crude phosphate rock. This appears to be a point that many phosphate miners do not consider. The demand for chemical manures is by no means increasing as rapidly as the production of crude phosphates. The Middle and Western States, to which Tennessee phosphate-sellers must eventually look for consumption, are yet too young in an agricultural sense to consume any considerable quantities of phosphates, but in course of time superphosphate manufacturing will spring up at Chicago, Cincinnati and other points. The Tennessee phosphate miners are now selling at \$6.00 per ton delivered in Atlanta, with guarantee of 70 per cent. bone phosphate and maximum 3 per cent. iron oxide and alumina. What is their profit at this price? Take, for example, the Totties Bend rock:

Cost of mining per ton.....	\$1.00
Hauling nine miles to railroad.....	1.50
Breaking phosphate.....	.25
Railroad freight to Atlanta.....	2.91
Total.....	\$5.66

To this is to be added brokerage, management, office expenses, interest on capital, etc., leaving practically no profit, if not, indeed, a loss. The Southwestern and Tennessee Companies' rock costs fifty cents less than above to get to railroad, but even in these cases there can be no money in the business so conducted. The hauling of the phosphate in wagons is necessarily only a temporary shift, as the bad roads in winter will put a stop to this work. If the business is to be a permanent one railroads must be built to the mines; this will, of course, much reduce present cost of production, but to offset this the present cheap method of mining by stripping will have to be abandoned, and drift mining will prove much more costly. The Nashville, Chattanooga & St. Louis Railroad people have shown an extremely liberal and progressive spirit in giving low freight rates, remarkably low, in fact, when compared with Florida railroad rates. Indeed, the present rates are as low as the mines can expect. As it is really to the interior market alone that the Tennessee phosphate miner can look, and as this market is comparatively small, if any profits are to be derived from the business, it must be effected by a combination to maintain prices and divide the

business among each producer. Cutting prices in an eager effort to sell the rock cannot but prove fatal to all engaged in the business. The miners must realize that their market is limited, and that it will be a matter of several years to increase it. The idea of selling in the Eastern market or shipping to Europe from Pensacola or by river to New Orleans and making that a shipping point is chimerical as yet, and may prove an *ignis fatuus* that will cause money to be lost. As soon as the Florida railroad people see any move of this kind their freight rates and terminal charges will be promptly reduced to such figures as to effectually shut out Tennessee from Europe or our Eastern markets. Those who have entered this business may hope by combination and with careful and intelligent management to receive a fair interest on their capital invested, but these companies that bore with a big auger and expect to run Florida and South Carolina and the competition in their own State out of the market may prove dismal failures, as the supply of commercial phosphate in South Carolina alone in sight is far more than thus far located in Tennessee, saying nothing of the vast beds in Florida. M.

Phosphate Markets.

OFFICE MANUFACTURERS' RECORD,
BALTIMORE, October 4.

The local phosphate market is quiet and about steady with a moderate inquiry. We note several sales made during the past week for delivery in the next sixty days. Advices from producing points report phosphate matters quiet and the market steady. South Carolina rock is quoted \$3.50 to \$3.75 f. o. b. for crude, \$4.25 to \$4.50 for hot-air dried, and \$6.50 for ground rock in bags f. o. b. Florida river pebble is quoted \$4.50 and land pebble \$4.50 to \$4.75 f. o. b. Punta Gorda or Tampa. The receipts of phosphate at this port for the month of September were 8362 tons, of which 2175 tons were from Florida and 6187 from South Carolina. The total receipts since January 1 last aggregate 63,733 tons. The local charters reported during the week are the schooners Nellie W. Howlett, Port Royal to Baltimore, and the Major Pickens, Tampa to Baltimore. In New York the freight market is not materially changed, and rates for steam and sail tonnage are easy for the former and steady for the latter. The phosphate charters reported for the week are as follows: A brig, 283 tons, from Navassa to Wilmington, N. C., and a schooner, 292 tons, at or about \$1.90; a schooner from Tampa to Baltimore at \$2.00 and loaded, and one from Tampa to Philadelphia at \$2.25; a schooner, 420 tons, from Ashley river, S. C., to Cartaret at \$2.00; bark, 473 tons, from Navassa to Cartaret, N. J., at \$2.00, and a British steamer, 1483 tons, from Fernandina to London at 15s.

FERTILIZER INGREDIENTS.

The general market continues quiet, with ammoniates very steady and business fairly satisfactory. The demand for leading fertilizing chemicals is light, and stocks ample. Thos. H. White & Co., in their circular, say: "During the past month there has been no concession from the closing prices of ammoniates quoted in our respects of September 1. A strong inquiry continues, and the dealers have been able to market their purchases of blood and concentrated tankage deliveries, September to December, on the basis of \$2.00 to \$2.25 and \$1.90 to \$1.95, respectively, f. o. b. Chicago. Producers are very firm now at \$2.30 for blood and \$2.00 to \$2.05 for concentrated f. o. b. Chicago and Kansas City, October to January." The entire fish catch has been sold, and prices now are \$24.50 for dry and \$14.00 for acid f. o. b. factory for current products. Nitrate of soda is steady, with a fair demand.

The following table represents the prices current at this date:

Sulphate of ammonia, gas.....	—@ \$3 75
Sulphate of ammonia, bone.....	3 30@ 3 35
Nitrate of soda.....	2 25@ 2 30
Hoof meal.....	2 50@
Blood.....	2 62 1/2@
Azotine (beef).....	2 40@ 2 50
Azotine (pork).....	2 50@
Tankage (concentrated).....	2 25@ 2 30
Tankage (9 and 20).....	2 30@ 10
Tankage (7 and 30).....	21 00@ 23 00
Fish (dry).....	24 50@
Fish (acid).....	15 00@

CHARLESTON, S. C., October 2.

The phosphate market here continues quiet, trade being dull, though inquiries are numerous. There is comparatively little doing in the way of shipments, save to local works. The miners show no disposition to curtail production and are pushing development. The river companies are doing full work, and the shipments from Beaufort are picking up considerably. The cyclone which passed over this section during the early part of last week did no damage whatever to shipping or mining plants. Reports from Beaufort are to the same effect, no injury or delay being caused to any of the companies. Prices quoted are from \$3.75 to \$4.00 crude, \$4.25 to \$4.50 hot-air-dried, and \$6.50 ground rock, all f. o. b. Charleston. The water shipments were brig Odorillo, 600 tons for New York. In port and loading are David Baird, S. B. Kay. The shipments since September 1, were 5053 tons crude rock, against 6025 tons for same date last year.

Phosphate and Fertilizer Notes.

SEVERAL new phosphate mines have recently been opened up near Fort White, Fla., and this winter promises to be the best season ever known.

The steamship Bellingham sailed from Brunswick last week for Hamburg, having on board 2150 tons of phosphate, and the Rosshire for the same port with 2327 tons of phosphate among her cargo. The ship-owners were the Brunswick Terminal Co.

DURING the month of September phosphate shipments have been very light, and the market at points of production quiet. The only shipment reported is the clearance of the steamship Blenheim with 3104 tons for Castr. p, Denmark, by the Anglo-Continental Guano Works.

AT the big guano works near Valdosta, Ga., all the buildings are practically completed. The costly and extensive machinery of the cottonseed-oil mill is all in place, and the shafting and belting are now being erected. Operations are expected to commence during the coming week.

MESSRS. W. A. EVANS & Co. have arranged to manufacture fertilizers at Fort Meade, Fla., and will commence operations at once. They will manufacture mostly for the south Florida trade, and will make nothing but high-grade concentrated fertilizers for the orange and vegetable industry.

THE Royal Chemical Co. was incorporated at Baltimore on the 28th ult. by Benjamin F. Cohen, Philip H. Close, John A. White, Harry O'Reik and John Watson for the manufacture of chemicals and fertilizers. The capital stock is \$20,000, divided into 400 shares of a par value of \$50.00 each.

MR. C. THALHEIM, who has managed the affairs of the Anglo-Continental Guano Works in Florida, has now severed his connection with that company. He has established himself at Ocala, Fla., and will conduct the phosphate business in the future on his own account. Mr. Thalheim, we learn, has the agency of some of the largest phosphate mines in this country.

THE advices from Fernandina and other Florida ports represent the phosphate industry as rather quiet at the moment. The heavy shipments made within the past three months have been generally to fill old orders, and the shipments now are nearly all for immediate delivery. It is expected that the shipping business at

Fernandina will be rather quiet for October, while November promises better. The British steamship Elmville is now loaded and will clear this week for Gothenburg and Stockholm with 2400 tons of phosphate from the French Company's mines. The British steamship Birdswald for Bremerhaven and Hamburg cleared this week with 2200 tons of phosphate for F. B. Arentz & Co. The British steamship Boston City arrived on the 26th and will load with 1750 tons of phosphate for London for the Anglo-Continental Guano Works.

ADVICES from Ocala, Fla., state that the following shipments of phosphate are in the course of preparation for the Anglo-Continental Guano Works: To load at Port Tampa, steamship Ursula with 2250 tons of phosphate, and at Fernandina, steamship Boston City with 1750 tons. The steamship Sydenham is shortly expected at Port Tampa to take about 3300 tons of phosphate, and a steamer at Savannah, not yet named, to take about 2500 tons. Mr. A. D. Horny, director and attorney of the Anglo-Continental (late Ollendorff's) Guano Works, at Ocala, Fla., has issued a circular, necessitated by the withdrawal of Mr. C. Thalheim, who has engaged in business on his own account, to the effect that he has arrived in Florida with full powers of attorney from the Anglo-Continental (late Ollendorff's) Guano Works. For the present, and pending new arrangements, Mr. Horny will personally attend to the phosphate business of the company, and all communications about same should be addressed to him at Ocala.

Iron Markets.

CINCINNATI, September 29.

There is a good deal of talk of lower prices impending on account of the increase of output by the furnaces. Considerable is said also on the line of a dull period following the activity of August and early September. On these lines it is argued by buyers that prices must ease up before long. If the premises are correct, the conclusions are of course right. It should be borne in mind, however, that considerable of the increase reported in active furnace capacity comes from furnaces making Bessemer iron, and only in small proportion from those making foundry and mill irons for the general market. Furthermore, there is no evidence that the improved demand has run its course and is slackening off. The contrary is the fact up to this writing. Nearly all foundries are doing a little more than they were a month or six weeks ago, and an addition of one heat a week on an average with 4000 foundries, which is perhaps a conservative estimate, means an increase of about 20 per cent. in actual consumption.

Furnacemen from their standpoint claim that well-filled order books, decreasing stocks and a continuous demand are not good reasons for making concessions in prices. While there is the old urgency to secure a share of current business, yet nearly all furnaces have booked large orders, many of them sufficient to take the entire product for months ahead.

The orders booked the past week include several of 1000 tons each, and a large number ranging down all the way to car-load lots. The reappearance of some demand from the car works is an encouraging sign, this class of trade having been practically dead for eight months. There is also a moderate inquiry for mill iron for puddling. For many months past the sale of this class of iron has been practically nothing. So far as can be seen, there is no disposition to speculative buying, nor to stock up because iron is cheap. Purchases are apparently to cover actual requirements.

We quote for cash f. o. b. cars Cincinnati: Southern coke No. 1 foundry..... \$10 25@ \$10 50
South. coke No. 2 foundry and No. 1 soft 9 75@ 10 00

Hanging Rock coke No. 1.....	12 00@ 12 50
Hanging Rock charcoal No. 1.....	16 00@ 17 00
Tennessee charcoal No. 1.....	14 00@ 14 50
Jackson county stone coal No. 1.....	14 50@ 16 00
Southern coke, gray forge.....	8 75@ 9 00
Southern coke, mottled.....	8 50@ 8 75
Standard Alabama car-wheel.....	16 25@ 17 25
Tennessee car-wheel.....	15 50@ 16 00
Lake Superior car-wheel.....	16 00@ 16 50

PHILADELPHIA, September 29.

The advance in freight rates for water delivery to Eastern seaboard cities which is to take effect October 1 has caused quite a lively movement of Alabama iron, and some contracts have been taken for early delivery based on present rates and for future delivery plus the advance. Virginia furnaces do not seem able to obtain as much money in the general market for their iron as their neighbors in Alabama. The average foundryman prefers Alabama iron because it is softer and carries more scrap; at the same time it gains strength on the remelt. Still there seems to be no reason why Virginia furnaces should slaughter prices to the extent they are now doing. Their rapidly-filling order books may cause a reaction.

We quote for cash f. o. b. Philadelphia docks:

Standard Alabama No. 1 X.....	\$11 50@ \$12 00
Standard Alabama No. 2 X.....	11 00@ 11 50
Strong lake ore coke iron No. 1 X.....	13 50@ 14 00
Strong lake ore coke iron No. 2 X.....	12 50@ 13 00
Lake Superior charcoal.....	15 00@ 15 50
Standard Alabama C. C. W.....	18 00@ 18 50

BUFFALO, September 29.

The demand in the territory tributary to this market continues in a surprising manner. Consumption is undoubtedly increasing, and is nearly, if not quite, on a par with production. Inquiries are numerous and well distributed, and each inquiry means a sale for some furnace, as there is no evidence of speculation in the market.

We quote on the cash basis f. o. b. cars Buffalo:

No. 1 foundry strong coke iron Lake Superior ore.....	—@ \$11 75
No. 2 foundry strong Lake Superior ore.....	—@ 11 25
Ohio strong softener No. 1.....	—@ 12 25
Jackson county silvery No. 1.....	15 75@ 16 75
Lake Superior charcoal.....	—@ 14 00
Tennessee charcoal No. 1.....	—@ 15 50
Southern soft No. 1.....	—@ 11 75
Hanging Rock charcoal.....	—@ 18 50

CHICAGO, September 29.

In the Chicago pig-iron market inquiries are still plenty, and the Northern coke furnaces report that they are contracting for a good-sized tonnage. Prices made on Northern metal are so low that consumers are dropping everything else as far as practicable; hence, Southern irons are more and more losing their hold here; notwithstanding this, they have not yet dropped out entirely. With prices on the two at anything like a parity, the Southern manufacturers today could have a very heavy tonnage from Chicago and the Northwest for their metal, as buyers almost without exception say they would prefer to run with 30 to 60 per cent. Southern iron, owing to the character of the product.

Prices on Southern and soft irons continue to be cut considerably below standard quotations, but the prominent furnaces throughout the South have made no change in their authority, and decline to do so on account of the heavy engagements which they have already made. Lake Superior charcoals are moving in carload quantities, but there is little going beyond this.

We quote for cash f. o. b. Chicago:

Southern coke No. 1 soft & No. 2 fdy.....	\$10 75@ \$11 00
Southern coke No. 2 soft & No. 3 fdy.....	10 50@ 10 75
Ohio Scotch softeners No. 1.....	13 00@ 13 50
Lake Superior charcoal Nos. 1 to 6.....	15 00@ 15 50

We quote for cash f. o. b. New York:

No. 1 foundry lake ore coke iron.....	\$13 50@ \$14 00
No. 2 foundry lake ore coke iron.....	12 50@ 13 00
No. 1 American-Scotch.....	13 50@ 14 00
No. 2 American-Scotch.....	13 00@ 13 50
No. 1 standard Southern.....	11 50@ 12 00
No. 2 standard Southern.....	11 00@ 11 50
No. 1 standard Southern soft.....	11 00@ 11 50
Standard Southern car-wheel.....	18 25@ 18 75

We quote for cash f. o. b. St. Louis:

Southern coke No. 1.....	\$11 00@ \$11 25
Southern coke No. 2.....	10 25@ 10 75
Southern coke No. 3.....	9 75@ 10 00
Southern gray forge.....	9 50@ 9 75
Southern charcoal No. 1.....	14 00@ 14 50
Missouri charcoal No. 1.....	13 00@ 13 55
Ohio softeners.....	14 00@ 14 50
Lake Superior car-wheel.....	16 00@ 16 50
Southern car-wheel.....	16 75@ 17 20
Genuine Connellsville coke.....	5 00
West Virginia coke.....	4 75

ROGERS, BROWN & Co.

is more pronounced. From the interior of the State advices are somewhat more encouraging. At Litcher, La., business is reported fair for the season, and every indication points to a good trade in the coming spring. Stocks are becoming reduced during the last two months, and inquiries are more numerous principally for early delivery in 1895. The Litcher & Moore Cypress Lumber Co. says that it has sold 100 per cent. more cypress lumber than it did last year for the same period. Cypress lumber is coming into more general use, and with a revival in trade sales of Louisiana cypress would be of considerable volume. The various saw mills along the lines of railroad entering this city are now actively engaged and have a fair amount of orders on file. Exports of dressed pine are growing larger as the season advances. The Poitevant-Favre Lumber Co. recently cleared a cargo for South America containing 1,050,000 feet, the approximate value being \$16,000 f. o. b. This company have also loaded cargoes of pine lumber and decking for the Belgian and French governments. The sash, blind and door factories throughout the city are all busy and report a good steady demand for all material. The firm of Roberts & Co., sash, door and blind manufacturers, are quite encouraged with the future outlook and have several large contracts to fill. The Louisiana Furniture Co. has had a quiet season and is now commencing to be quite busy, having received a number of orders lately. The local building demand is quite active, and mechanics throughout the city are all actively employed. The business in cross-ties is becoming of great importance, the demand from railroads having lately improved. G. A. & W. N. Logue are busily engaged at their camps getting out cross-ties for the Louisville & Nashville Railroad Co. This firm has on hand at present about half a million feet of hewn and cypress piles for railroad bridges.

Southern Lumber Notes.

THE Gumberry Lumber Mills, near Weldon, N. C., have shut down for a short time, owing to the dullness of the lumber market.

THE Marbury Lumber Co., of Bozane, Ala., reports business improving a little, and it is expected that mills will soon be again on full time.

THE Spanish steamship Ernesto, loaded with a cargo of timber at Mobile, went down the channel on the 23d ult. drawing twenty-two feet of water.

ON the 24th ult. the dry-kiln of the Tyler Star Lumber Co., at Gilmer, Texas, was destroyed by fire, entailing a loss variously estimated at \$3000 to \$4000.

E. J. CARRINGTON, of Bay City, Mich., received last week over 4,000,000 feet of lumber direct from a Canadian saw mill, and shipped by the Spanish Lumber Co.

THE planing mill of the Harold Mill Co., at Brewton, Ala., was burned last week. A lot of 300,000 feet of lumber was also destroyed. The total loss is estimated at \$10,000, with no insurance.

THE planing mill of W. H. Muscroft & Co., of Louisville, Ky., was partially destroyed by fire last week. The loss will reach between \$5000 and \$6000. The firm carries insurance to the amount of \$4500.

MESSRS. COOPER & PHILLIPS have started a planing mill at Abbeville, Ga., on the Abbeville & Waycross Railroad. The firm is a very enterprising one, and will make many extensive improvements at this point.

MR. URIAH BLACKSHER, of the Blachsher Lumber Co., is building a logging road seven miles long in the upper edge of Baldwin county. He has sixty hands at work grading, and is pushing the work to completion.

THE largest cargo of lumber that ever left the port of Mobile was taken last week

by the steamship Parkfield, which carried out 1,800,000 superficial feet. She was loaded by Messrs. Martin Taylor & Co., and goes to Scotland.

A SPECIAL from Daleville, Ark., states that a fire which started in the dry-kiln of the Arkadelphia Lumber Co.'s yard on the 24th ult. destroyed the mill and a large quantity of lumber. The plant destroyed was said to be the largest in the State. The loss is estimated at \$50,000.

A SPECIAL from Colmesneil, Texas, states that the saw mills at Village will start up again on October 1. The Warren Mills started up on the 24th ult. The Nebraska Lumber Co.'s mills at Doucette and the Aldridge Company's mills at Rockland will continue running on full time. Shipments are increasing on both the roads, and the outlook for better prices and demand is more active than it was a month ago.

THE large saw mill of Brown & Flewellin, at Longview, Texas, was burned on the 26th ult.; supposed to be the work of an incendiary. The total loss is said to be very large, but the exact amount cannot be estimated at the moment. About 100,000 feet of lumber was consumed. The company had just completed a new mill out on its log railroad, which will now be used to cut enough lumber to fill all orders until the mill is rebuilt at Longview.

THE Moreton & Heims Lumber Co., of Brookhaven, La., has recently sold 1300 acres of pine farmland between Brookhaven and Bogue Chitto to Illinois people. It will be subdivided into small farms, and during the fall and winter some twenty-five or thirty thrifty Illinois families are expected to settle upon it. On the same quality of land the Moreton & Heims Lumber Co. has raised large fields of corn this year to support its teams. The average yield was thirty-five and forty bushels to the acre.

IT is expected that the lumber trade at Chattanooga will be of a larger volume this winter than usual. About 15,000,000 feet of logs are now waiting for a rise in the river. All the mills will be actively engaged as soon as the logs come. Loomis & Hart and Snodgrass & Field are also expecting a large quantity of logs. Thousands of feet of poplar lumber are shipped during the season to St. Louis by steamer, and of the past season's cut about 50 per cent. was poplar, 25 per cent. pine, 15 per cent. white, and the rest walnut and other woods.

THE directors of the Tuckasee Lumber Co., of New York, met last week and elected officers to complete their organizations as follows: President, H. K. S. Williams, of the firm of I. T. Williams & Son; vice-president, Allen W. Adams, of Wilson, Adams & Co.; treasurer, George Hagemyer, of G. Hagemyer & Sons. The board of directors consists of H. K. S. Williams, Allen W. Adams, George Hagemyer, G. B. Hanford, J. M. Edie and W. H. Chew. The corporation represents many prominent firms in the lumber trade having offices in New York city.

IN a letter to the MANUFACTURERS' RECORD, Harry S. Williams, 734 Union street, New Orleans, La., writes: "Am pleased to note a slight improvement of the lumber business in this region. Lumbermen inform me that inquiries are becoming more numerous, but prices are still very low, with no prospect of advance at present. Enquiries for machinery are increasing daily, and business in our line has improved very much in past six weeks." Mr. Williams is the Southern representative of the Hall & Brown Woodworking Machine Co., of St. Louis, Mo.

THE Bodcaw Lumber Co., of Texarkana, Texas, and Stamps, Ark., has just contracted with the Edward P. Allis Co., of Milwaukee, Wis., for a new saw-mill plant to be built at Stamps, Ark. The mill building proper, which will be built of yellow pine and oak, will be 60x100 feet,

two stories high. The power will consist of a large "1890" frame Reynolds-Corliss engine and four sixty-six inches by sixteen feet tubular boilers with oven fronts. The cutting machinery will consist of two No. 3 new Allis band mills and a large gang, one three-block and one two-block Reliance gang-edgers, with trimmers, slasher and all the most modern machinery now in use. This mill will be the first saw mill containing bands located on the Cotton Belt road. It will be ready for operation late in February, 1895.

Wise Men

read the advertising pages of the MANUFACTURERS' RECORD carefully because they are always sure to find something of value; it may be a special sale, or an opportunity for investment, or some new machinery, or some one looking for a location for a factory, or a thousand and one things advertised that may concern you. Every man ought to study newspapers, not simply glance over them, but examine in detail the MANUFACTURERS' RECORD, for instance, and he will be sure to find something that can be made profitable in his business. In its news columns and in its advertising pages he will find matter that may prove invaluable in his business operations.

TRADE NOTES.

A CONCERN which is well equipped for turning out superior work is the Southern Telephone Co., of Fayetteville, N. C. This company recently removed from Bennettsville, S. C., to Fayetteville, and is manufacturing telephones, central office switch equipment, electric motors, etc. It also handles all classes of line and electric supplies.

THE Nonpareil anti-friction metal is being used in large quantities. Especial advantages are claimed for this metal for extraordinary high-speed machinery. It is equally adaptable for light or heavy machinery and capable of sustaining great weight. Durability and cheapness are also characteristics. It is manufactured by Theodore Hertz & Son, Montrose and Park avenue, St. Louis, Mo.

THE Norwich Line, between Boston and New York, is keeping abreast of the times in recently putting in commission the new twin screw steamer "City of Lowell," which has the latest improvements in fittings as well as great speed, having won for itself the name of the "Greyhound of the Sound." The other steamers of this line also are spacious and fast, and one of the most comfortable boats running through the sound is the staunch "City of Worcester." Steamers leave New London at 11 P. M., making connections with late Boston trains so that passengers arrive in New York in ample time for business. In returning from New York to Boston steamers leave Pier 40, North river, at 5.30 P. M., and the connecting train is due in Boston at 9 A. M.

THE New York Clearing-House has recently contracted for what is believed to be the heaviest vault work ever built in any part of the world. The specifications demand that five ply welded chrome steel and iron, made by the Chrom-Steel Works, Brooklyn, N. Y., be used in its burglar-proof construction. This well-known material is now and has for a long time past been used in the burglar-proof vault construction of many of the principal financial institutions in this country and Canada. A large shipment was recently made from these works of battery shoes and dies to be used in the Witwatersrand district, South Africa. This company is supplying many of the stamp mills all over the American continent with battery shoes and dies and other stamp-mill castings, and this order would indicate that the mining companies on the other side of the world are acquainted with the merits of chrome steel castings.

AN electric motor has been devised for farming purposes that promises to be an important departure in agricultural machinery. It is designed to be used for hauling plows, harrows, loaded wagons, etc., and for driving mowers, reapers and threshing machines. This motor, it is stated, will go anywhere that horses can pull a load, and will work in any field where it is now practicable to use a reaping machine. A leading electric engineer gives the practicability of the invention his unqualified indorsement, with the opinion that it can do the various operations of cultivating the soil and harvesting the grain much cheaper than by present methods. The application of the electric motor to farming purposes is probably the greatest unoccupied field that there is for its use. Its lightness, its capacity to double

and treble its normal power in case of emergency and the ease with which one man can guide and control a power equal to that of many span of horses peculiarly adapts it for the purpose. The inventor is desirous of obtaining the necessary financial assistance to develop the invention. Anyone disposed to become interested can obtain particulars from the card to be seen in our advertising columns.

THE American Road Machine Co., Kennett Square, Pa., is conspicuous as a manufacturer of high class road making machinery and tools. Its plant at Kennett Square is large and well equipped in every department and a model establishment of its kind. During the current year considerable new machinery has been put in the works, in addition to which the company will put in two new boilers this fall, each of eighty horsepower. The building of a new office building, on the premises at Kennett Square is also contemplated, the structure to be about 40x40 feet and two stories high. The new apartments will be heated by steam and furnished with all modern improvements in the way of office fixtures, designed to facilitate the expeditious and convenient handling of the company's steadily-growing business. Business with this company during the year just closing has been especially satisfactory, the popularity of its road rollers, road scrapers, rock crushers, plows and other road-making tools showing up in a gratifying manner. The company issues for gratuitous distribution a quantity of literature upon the subject of road building and improvement which will be found interesting by persons concerned with the making and maintenance of good roads.

ONE of the best equipped establishments in the country is the steel-castings plant recently completed for the Drexel Railway Supply Co. at East Chicago, Ill. Every facility for turning out standard and special castings is provided, and the location and arrangement of the works enables the handling of large contracts in an expeditious manner. The company is now prepared to make steel castings of any description, particularly car and locomotive castings of all kinds, including couplers, brake shoes, knuckles, wedges, followers, etc. Other products embrace machine castings, gearing, sprockets and clutches, dies and die blocks, dynamo and electric castings and street-railway castings. This company has a complete machine shop, forge shop, iron foundry and pressed-steel works, giving ample facilities for the manufacture of all kinds of specialties. In pressed steel supplies it makes the M. C. B. standard top-hinge lid, Drexel side-hinge lid, Hewitt type of lid and M. C. B. standard brake-shoe key. The company also manufactures the Drexel M. C. B. coupler, Barr vestibule, Drexel truck, Gibbs spring dampener, automatic dust guard for hose couplings and the Drexel car replacer. The general offices of the company are in the "Rookery," Chicago, Ill. W. A. Alexander is president; A. C. McCord, vice-president, and D. W. McCord, secretary and treasurer.

TRADE LITERATURE.

A GENERAL catalogue devoted to contractors' machinery and supplies, such as hoisting engines, derricks, derrick fittings, pumps, grinding machinery, windlasses, wire and manilla rope and blocks, has just been issued by Thomas Carlin's Sons, Allegheny, Pa. A copy can be secured on application.

A COMPLETE directory of York city and county, Pa., has just been published by the Bell Publishing Co., 1518 Maryland avenue, Baltimore, Md. Much care has been exercised to make the book reliable, and, as a result, unusual completeness in all features are evidenced. It contains a general directory of York city, Delta, Hanover and Wrightsville, also an alphabetical list of York county.

ENGLISH opinions on anything American are always interesting, and an expression of opinion on American textile machinery coming from a country which prides itself on its progress in this direction is of especial value. The Textile Manufacturer, of Manchester, England, a high authority, recently published an article on American looms in which much tribute is paid to the Mason Machine Works, Taunton, Mass., and its product. The article is a comparative one and shows that American machine builders are fully alive to the requirements of their patrons. A neat pamphlet, reproducing the article, has been issued by the Mason Machine Works.

A CATALOGUE just issued by the E. W. Bliss Co., 17 Adams street, Brooklyn, N. Y., describes a new friction clutch which this company is introducing. This concern has been an extensive user of friction clutches, nearly every geared machine built at its works being operated by one, and its departure in manufacturing them was for the purpose of procuring a more effective device. The company has secured the patent rights of a clutch which it deems as far near perfection as possible for any such mechanism to attain, and has established a special plant to manufacture them. The distinctive features of this device are explained in the catalogue.

CONSTRUCTION DEPARTMENT.

WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad under way, and every mining company organized. This information is always fresh and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

*Means machinery is wanted, particulars of which will be found under the head of "Machinery Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

ALABAMA.

Birmingham—Book Company.—B. F. and J. B. Roden and F. L. Bivings have incorporated the Birmingham Book Co. with a capital stock of \$5000.

Birmingham—Coal Mines.—It is rumored that H. F. De Bardeleben and J. W. Worthington will cooperate for the purpose of mining coal extensively in Walker county. It is also said that they will lease the Talledega furnace, put it in blast and open new iron mines.

Bridgeport—Grain Elevator.—The Nashville & Chattanooga Railroad Co. has let contract to Burke Bros. for the erection of buildings for a grain elevator, and work on same will commence at once. The plant is to have a capacity of 150 carloads; is to be 100x200 feet, and be completed in sixty days; estimated cost about \$15,000.

Bridgeport—Creamery.—An effort is being made to organize a co-operative stock company to establish a creamery. R. C. Johnson, president Southern Land & Immigration Co. can be addressed.

Columbia—Water Works.—Work has commenced on the water system recently contracted for by the city. Address the mayor.

East Gadsden—Creamery.—E. H. Morrill will establish a creamery and cheese factory.

Florence—Creamery.—Endeavors are being made to organize a creamery company. M. J. Dillard, R. D. Martin, J. I. Mitchell and others are interested.

Huntsville—Furniture Factory.—The West Huntsville Furniture Co. will erect an additional building to its factory. It will be three stories high, 50x150 feet, and the capacity of the factory will be greatly increased.

Jacksonville—Cottonseed-oil Mill.—The Jacksonville Oil Mill Co. has been organized, and will erect a large cottonseed-oil mill equipped with the latest improved machinery and to employ twenty-five hands. V. H. Marshall is president and general manager; Geo. P. Ide, secretary-treasurer; directors, Chas. E. Pearce, of Ohio; P. Rowan, E. F. Crook, S. D. G. Brothers, V. H. Marshall and Geo. P. Ide.

Mobile—Shingle Mill.—The Seaboard Manufacturing Co.'s new shingle mill in Washington county is nearly completed. The plant will have a daily capacity of 150,000 shingles.

New Decatur—Plumbing, etc.—H. & W. Forstman have started a steam and gas fitting and plumbing shop.

Warrior—Bridge.—The county commissioners will receive sealed proposals until October 6 for the erection of an iron bridge according to plans now on hand.

Piedmont—Cotton Gin.—R. F. Hughes will put a new engine in his cotton gin.

ARKANSAS.

Fayetteville—Water Works.—The construction of the water works noted last week is very probable. Geo. C. Morgan, of Chicago, will prepare plans.

Kedron—Lumber Mill.—W. P. Kaufman, of Tipton, Tenn., has purchased R. M. Knox's saw mill at Knox's Spur, and will operate it. Mr. Kaufman will also put in \$10,000 worth of stove machinery and employ a large number of hands.

Mammoth Springs—Ice Plant.—An ice plant is talked of, and George Matison, of Carthage, is said to be interested.

Nebo—Flour Mill.—Covey & Witty have completed a flour mill.

Stamps—Saw Mill.—The Bodcaw Lumber Co., which recently decided to build a new saw-mill plant, has let contract to the E. P. Allis Co., of Milwaukee, for a complete new plant. The building will be a two story structure 60x160 feet, and is to be equipped with band mills and gang, trimmers, slashers, steam feeds, riggers, turners, etc.; an electric-light plant will also be installed and a pump for fire protection. All machinery has been contracted for, and the plant will be completed about February, 1895.

FLORIDA.

De Land—Ice and Cold-storage Plant.—R. D. McDonald, Wm. Dunn, E. W. Jamison, B. B. Jamison and Hiram Waters, of De Land; E. Linbaugh, R. C. Dearborn and Morris Sherman, of Jacksonville, have organized an \$8000 stock company to put in an ice and cold-storage plant.

Jacksonville—Electric Plant.—The Jacksonville Street Railway Co. has let contract to Brown & Garber, of Washington, D. C., for the erection of its proposed electric-power plant. The machinery is now en route.

Kissimmee—Cannery.—W. H. Halsey has started a cannery.

Olustee—Lumber Mill.—The Eppinger & Russell Lumber Co. has reorganized and will put its mill in operation, employing 100 men; capital, \$500,000; offices, Jacksonville and New York.

Pensacola—Electric-light and Power and Ice Plant.—The new Citizens' Electric Light & Power Co. has let contract to L. C. Sarra for the erection of a building for its plant; building is to be of brick, 45x72 feet. The machinery will include a 1500-light incandescent dynamo and a 100-light arc dynamo. Later on the company intends to put in ice machinery.

Plant City—Packing-house.—A. M. Barns & Son are erecting a packing-house.

Reddick—Veneer Plant.—L. S. Light will shortly put in a veneering plant.

Seville—Turpentine Farm.—D. B. Paxton will establish a turpentine farm near Seville. About 100 hands will be employed. Mr. Paxton cuts his own boxes.

Tampa—Cigar Factory.—Antonio M. Castillo and Sixto Martinez will locate a cigar factory. Work has been commenced on a building three stories high, 35x70 feet. Capacity yearly will be 900,000 cigars.

Tampa—Factory.—J. Seidenberg & Co. will erect a factory.

Wildwood—Turpentine Farm.—W. B. McKeithen, representing a company, is said to be endeavoring to secure 6000 acres of land for the purpose of starting a turpentine farm.

Windermere—Lumber Mill.—The Windermere Investment Co. will erect a plant for the manufacture of lumber, orange boxes and crates. The company has a capital stock of \$20,000, and expects to employ when in full operation from fifty to seventy-five hands. J. H. Laws is manager.

GEORGIA.

Abbeville—Planing Mill.—Cooper & Phillips have started a planing mill.

Americus—Electric-light Plant.—The city is considering the erection of an electric-light plant. Address the mayor.

Augusta—Cotton Mill Resumes.—The Dartmouth Spinning Co.'s plant has resumed, after extensive improvements; J. M. Head, manager.

Augusta—Handle Factory.—R. J. Russell will establish a factory for the manufacture of handles. Machinery has been purchased.

Carrollton—Electric-light Plant.—Cliff Turner intends to remove his electric plant from Carrollton and it is proposed that a company be formed to purchase it, so that it may stay in the city.

Cedartown—Iron Mines.—F. Fielding Fitch has leased the mines of the Woodstock Iron Co. and of Leake & Van Devander, located near Cedartown. The ore on the property is a high-grade brown hematite, and will be thoroughly developed at once.

Dalton—Cold-storage Plant.—Davis & Son are putting in a cold-storage plant.

Dalton—Cotton-mill Addition.—The Crown Cotton Mills has completed a two-story brick addition 50x128 feet. Machinery will be put in to about double the plant's present capacity at a cost of about \$35,000.

Ellijay—Creamery.—A butter and cheese factory will be built at once. Machinery has been secured.

Elberton—Electric-light and Water Works.—The city contemplates erecting an electric-light plant and a water-works system, and a mass-meeting of citizens has been held to suggest an issue of bonds for \$50,000. The council has been ordered

to call an election within thirty days to decide as to such an issuance of bonds, and the election will doubtless carry. Address the mayor, or W. B. Henry, clerk to council.

Fort Valley—Wire Works.—In reporting the American Flexible Wire Co., noted last week as organized, errors were made in the names of officers. They should have been as follows: J. A. Spain, president; T. H. Logwood, vice president, and J. O. Bradley, secretary-treasurer. The company manufactures patent wire plow lines, teamster-lines, dog chains, tie-reins, grazing-lines, etc.

Rome—Mining, Manufacturing, etc.—D. B. Hamilton, Thompson Hiles, C. M. Harper and Harper Hamilton have incorporated the Real Estate, Mining & Manufacturing Co. to develop ore mines, open quarries, manufacture, etc. The capital stock is \$10,000, with privilege of increasing to \$200,000.

KENTUCKY.

Calhoun—Coal Mine.—J. W. Brackett and J. E. Johnson are sinking a shaft for coal and will probably open a mine.

Edmonton—Flour Mill.—M. Duke & Son will build a 40-barrel roller flour mill.

Griffin—Water-tower.—The city is about to contract for a new water-tower seventy feet high, and tank thirty feet in diameter and fifty feet high; W. K. Howard, superintendent.

Louisville—Cold-storage Plant, etc.—The Hite Estate will build a cold-storage, icehouse and bakery building, three stories high, 52x154 feet, with all modern improvements, to cost \$8000. D. X. Murphy has prepared plans.

Louisville—Tobacco Factory, etc.—Drach, Thomas & Bohn have prepared plans for a four-story 60x195 feet tobacco factory and warehouse, which is to be built at a cost of \$28,000.

Madisonville—Water Works.—The construction of water works is talked of. A \$50,000 plant is proposed.

Princeton—Water Works.—E. H. Daniel has lately completed a water-works system, and the city council is now considering a proposition from him to lay pipes for supplying the town.

LOUISIANA.

Calhoun—Tobacco Factory.—A company has been organized to erect a tobacco factory with a capital stock of \$25,000, and outfit of machinery has been purchased. R. L. Brian is president.

Crowley—Canal.—A company has been organized with a capital stock of \$100,000 and let contract to Warner & Co., of New Orleans, for the construction of a canal from Bayou Queue Tortue to the Gueydon lands. The canal will be eighty-one feet wide and four feet deep.

Iberville—Sugar Machinery.—The Iberville Planting & Manufacturing Co., Limited, has let contract for a triple effect of the latest pattern, with capacity to evaporate 150,000 gallons of juice every twenty-four hours.

New Orleans—Electric-power Plant.—The Louisiana Electric Light Co., at a meeting to be held in New York shortly, will consider the erection of a power station for electric-car service.

New Orleans—Ice Plant.—The erection of a 150-ton ice plant is talked of. John F. Foster and William Russell are said to be interested.

New Orleans—Boiler and Iron Works.—The Stokes Boiler & Sheet Iron Manufacturing Co., Limited, noted last week as incorporated, will erect a complete plant for manufacturing boilers, sheet iron, etc. Alphonse Marx is president; P. O. Box 465.

New Orleans—Dredging.—Jas. B. Quinn, United States engineer, will receive proposals until October 29 for dredging Sabine Pass (Texas) harbor and extending the east jetty.

Rush Point—Oil Mill.—Lawler & Chaery, of New Orleans, the new owners of the Rush Point cottonseed-oil mill, are about to put the plant in operation.

Shreveport—Wagon Factory.—Fred G. Snyder, of Camden, proposes to remove his wagon factory to Shreveport and has made a proposition to that effect. A plant to cost about \$15,000 is contemplated. The Shreveport Development Club will endeavor to meet the terms of the proposition.

MARYLAND.

Baltimore—Chemical Works.—Benjamin F. Cohen, Philip H. Close, Jno. A. White, Harry O'Reik and Jno. Watson, Jr., have incorporated the Royak Chemical Co. for the purpose of manufacturing chemicals and fertilizers. The capital stock is \$20,000.

Baltimore—Land Improvement.—The Irvington Real Estate Co., Jos. M. Cone, president, has purchased thirty-seven acres of land at Irvington for \$37,000, and will improve same for suburban building lots.

Baltimore—Manufacturing.—Jno. B. Maling, Geo. W. Smith, Jno. W. Hartzell, Henry O. Hartzell

and Harry D. Tilghman have incorporated the Arctic Fan Co. for manufacturing patent fans, etc. The capital stock is \$50,000.

Baltimore—Warehouse Company.—Jas. A. Gary, Jno. S. Gittings, Charles Adler and others have incorporated the Security Storage & Trust Co. with a capital stock of \$100,000.

Bethesda—Gold Mines.—The Bethesda Mining Co., reported lately (under Baltimore) as incorporated, has purchased a tract of land near Bethesda for \$100,000. The land is said to contain valuable gold deposits, and it is the company's intention to develop same. Gustavus W. Lehmann, John C. Powell and Richard Walz, all of Baltimore, are interested.

Chestertown—Lumber Mill.—R. T. Turner, of Betterton, has bought the Turner saw and planing mill at Chestertown.

Eastport—Cannery.—The establishment of a canning factory is talked of.

Eastport—Glass Works.—The Eastport Glass Works are to be put in operation by November 1 by a company now endeavoring to organize. Chas. G. Feldmeyer and Chas. J. Murphy, of Annapolis, are interested.

Frederick—Flour Mill.—C. E. Mealy will put in a flour mill.

Lonaconing.—John Kinloch has put in an engine and other machinery to facilitate his butchering business.

Tannery—Electric-light Plant.—The Schlosser Tannery, England & Bryan, proprietors, will put in an electric-light plant; all machinery purchased.

Washington, D. C.—Bakery.—Christian Schneider will establish a bakery at 1645 New Jersey avenue.

West Friendship—Flour Mill.—M. W. Shipley will put in a roller flour mill.

MISSISSIPPI.

Coffeeville—Water Works.—The construction of water works is talked of.

Enterprise—Knitting Mill.—The Enterprise Knitting Mills will soon put in more machinery.

Grenada—Hotel Company.—J. W. Griffith, G. W. Trimble, J. W. McLeod and others have incorporated the Grenada Hotel Co. with a capital stock of \$5000.

Hattiesburg—Saw Mill.—The Bowie Lumber Co. has been organized and is now erecting a 40,000 capacity mill on Bowie river, three miles west of Hattiesburg, and will cut export timber.

Hattiesburg—Saw Mill.—M. L. Thompson and S. A. Hinton, of Bonhomie, have bought the McInnis & Redus mill, three miles north of Hattiesburg, and will begin operation at once.

Meridian—Cotton Company.—Thos. C., Eugene H. and Edward G. Carter and others have incorporated the Carter Cotton Co. with a capital stock of \$25,000 to deal in cotton, etc.

MISSOURI.

Bosworth—Flour Mill.—E. Walker & Co. will rebuild their flour mill at once; building is to be thirty-seven feet high, 40x40 feet.

Carrollton—Harness Factory.—J. J. Jarbon, Chas. E. Miller and Joseph Dain, Jr., have incorporated the Carrollton Harness Manufacturing Co. with a capital stock of \$6000.

Kansas City—Pharmacy.—T. O. Robertson, H. C. Shepherd and Hattie Robertson have incorporated the T. O. Robertson Crystal Pharmacy Co. with a capital of \$25,000.

Kansas City—Factory, etc.—C. J. Hubbard (Sixth and Delaware streets), representing Boston capitalists, has plans for a 72x127 feet five-story fire-proof factory and warehouse to be built at a cost of \$35,000.

Kansas City—Building Material.—J. H. Schmidt, John A. Wible and Mary Wible have incorporated the Schmidt & Wible Mercantile Co. to deal in sash, doors, etc., with a capital stock of \$50,000.

Neosho—Electric-light Plant.—The Neosho Electric Light Co. will erect a plant if the city grants franchise. Machinery is all contracted for.

Oregon—Water Works.—The city will construct a system of water works. Address J. E. Cummins, mayor.

Salisbury—Water Works.—Bonds will be issued by the city for the construction of water works. Address the mayor.

Salisbury—Water Works.—The city has voted an issuance of \$15,000 in bonds to construct water works; T. Newbold, city clerk.

Salisbury—Flour Mill.—Robert Mylor will build a flour mill.

St. Louis—Jewelry Company.—The F. H. Niehaus & Sons Jewelry Co. has been incorporated with a capital stock of \$50,000.

St. Louis—Lumber, etc.—James N. and Wm. F. McKelvey and Wm. J. Armstrong have incorporated the J. N. McKelvey Building Co. to deal in

lumber and build houses with a capital stock of \$2000.

St. Louis—Liquor Company.—The W. B. King Liquor Co. has been incorporated with a capital stock of \$2000.

St. Louis.—The Stifel-O'Neil Home Comfort Co. has been incorporated with a capital stock of \$20,000.

St. Louis—Chemical Company.—A charter has been issued to the Debilatory Chemical Co. with a capital of \$5000.

St. Louis—Mercantile.—The Enterprise Grocery & Meat Co. has been incorporated with a capital of \$2500.

St. Louis—Realty.—The Royal Realty Co. has been incorporated with a capital stock of \$86,200.

West Plains—Furniture Company.—Charles Dressler, J. B. McFarland and S. F. Farmer have incorporated the Dressler Stove & Furniture Co. with a capital stock of \$5000.

NORTH CAROLINA.

Asheville—Telephone System.—A company has been formed to construct a telephone system from Asheville to Weaverville, a distance of nine and one-half miles.

Asheville—Timber Developments, etc.—The Tuckasega Timber Co., reported last week, has not as yet formulated plans for developing the 75,000 acres of timber land which it has purchased, but will probably contract with local sawyers for cutting the timber. Several plans are in view for developing the water-powers on the property. G. B. Hanford, 218 Lewis street, New York city, can be addressed.

Charlotte—Electric-light Plant.—The Charlotte Consolidated Construction Co. will put in its electric-light plant at Dilworth a complete incandescent system for lighting the city of Charlotte.

Charlotte—Cotton Mill.—The Charlotte Oil & Fertilizer Co. will erect a cotton-batting factory, and Fred Oliver, manager, has gone North to buy the required machinery. New building will be erected at once.

Durham.—The Durham Liquor & Opium Cure Co. has been organized with H. J. Bass, president; J. W. Wellons, vice-president, and Chas. E. Turney, secretary; capital stock \$3000.

Durham—Saw Mill, etc.—R. D. Patterson has rebuilt his saw and grist mill located near Durham.

Fayetteville—Telephone Works, etc.—The Southern Telephone Co., late of Bennettsville, S. C., has removed to Fayetteville and commenced the manufacture of telephones, central office switch equipment, electric motors, and deals in all classes of line supplies, etc.

Fayetteville—Twine Mill.—It is reported that A. C. Watson and others will start a cotton-twine mill.

Forest City—Cotton Mill.—The Florence Mills will erect a new engine-house and make improvements to its mill; work is to commence at once.

Forest City—Store.—T. C. McBrayser has commenced the erection of a brick store building.

Gastonia—Mercantile.—The Gastonia Hardware Co. will engage in the cotton-mill-supply business.

Greensboro—Tobacco Factory.—E. J. & A. J. Stafford, of Statesville, write in reference to the report that they are to build tobacco works in Greensboro, that it is "a matter of uncertainty as yet; not any time soon, if at all."

Henrietta—Factory.—T. H. Gaither, of Rutherfordton, has been surveying the river near Henrietta for a Northern party who contemplates building a factory.

King's Mountain—Gold Mine.—The Philadelphia & Washington Gold Mining Co., which recently acquired the King's Mountain gold mines, has equipped same with a complete mining plant, and is pushing work on the property.

King's Mountain—Cotton Mill.—The Dilling Cotton Mill will put in 150 additional looms; contract awarded.

Mocksville—Sugar Mill.—L. M. McClamrock has put in a large steam cane mill.

Monroe—Cotton Gin.—Lee & Williams are putting in a 70-saw gin, feeder and condenser near Monroe.

Morganton—Electric-light Plant.—An electric-light plant is being installed in the Deaf and Dumb School; contracts all let.

Pineville—Cotton Mill.—Work is about to be commenced on an addition to the Pineville Cotton Mill.

Reidsboro—Planing Mill.—W. R. Reel & Bro. contemplate putting in planing and matching machinery very soon.

Scotland Neck—Dry-kiln.—Dunn & Coughenour have broken ground for a steam dry-kiln.

Statesville—Snuff Factory.—J. W. Beard, Jr., and E. J. Stafford contemplate starting a snuff factory.

Webster—Paper Mill.—W. F. Tompkins has sold some land to a Philadelphia party who may possibly erect a factory, probably a paper mill.

Winston—Flour Mill.—J. M. Cummings contemplates putting in a 20-barrel roller flour mill.

SOUTH CAROLINA.

Abbeville—Vehicle Works.—J. Allen Smith is erecting a new carriage and buggy shop.

Bennettsville—Cottonseed-oil Mill.—The Marlboro Oil Mill, under new management, has increased its capacity considerably and is working day and night. A. C. McFall is manager.

Columbia—Cotton Mill.—A report in a local paper states that W. H. Chew has about completed the sale of the Saluda water-power in Lexington county to parties who will erect a cotton mill. It is said that a 40,000-spindle plant is contemplated.

Cowpens—New Machinery.—Messrs. Wilkins have put in a new twenty horse power engine at their gin.

Greenville—Oil Mill.—The Greenville Oil Mill Co. has started up its cottonseed oil mill for the season.

Greenville—Cotton Mill.—W. E. Beattie has purchased the Lanneau Cotton Mill at auction for \$15,000. The plant is equipped with 2200 spindles, and will be operated by Thompson W. Earle and W. E. Touchstone, under the name of the Greenville Cotton Mills. Forty hands will be employed.

Liberty—Mercantile.—Wm. Hunter, T. N. Hunter, C. E. Hamilton, M. A. Boggs, B. D. Mauldin and John Hunter have incorporated as Hunter, Boggs & Co. to transact a merchandise business; capital stock \$5000.

Liberty—Mercantile.—William Hunter, Sr., T. N. Hunter, C. E. Hamilton, M. A. Boggs, B. D. Mauldin and John Hunter have incorporated the Hunter Boggs Co. with a capital stock of \$5000 to conduct a merchandise business.

Myers—Woodenware Factory.—The Farmers' Basket & Package Co., lately noted (under Charleston), has purchased a complete plant for the manufacture of woodenware, and will locate same at Myers. Other machinery may be added later on. From 100 to 250 hands will be employed, according to the seasons.

Rock Hill—Cotton Mill.—It is proposed to organize a company to erect a cotton mill. T. P. Lowndes is placing stock.

TENNESSEE.

Blue Spring Station—Lead Mines.—Frank Argyle, of Burlington, Iowa, and associates, who are to develop lead mines in Tennessee, will expend \$100,000, and more if necessary.

Chattanooga—Woodworking Plant.—Wm. E. Ashcraft will increase the capacity of his wooden butter-dish factory from 40,000 to 50,000 daily.

Dickson—Woodworking Plant.—T. C. Seaman contemplates erecting a heading and stave plant, and is now looking for a location.

Fountain City—Gas Plant.—A gasoline gas plant is being built at the Fountain City College.

Harriman—Planing Mill.—S. H. Kellar is adding new machinery to his planing mill.

Harriman—Cannery.—Isham Benefiel is endeavoring to secure the location of a cannery.

Harriman—Gas Plant.—Isham Benefiel is corresponding with G. Bowen, of Thornstown, Ind., relative to the erection of a gas plant in Harriman.

Kingston—Handle Works, etc.—The Kingston Handle & Wheelbarrow Manufacturing Co. has completed its factory building, and is now putting in machinery. H. H. Walker is manager.

Kingston—Tile Works.—A company is being organized to establish drain-tile works.

Lewisburg—Printing Plant.—Horace Merritt, W. N. Ewing, Ed Bates and Tim Tiller have purchased a printing plant and will publish a newspaper.

Montgomery—Lumber Mill.—The Emery River Boom & Lumber Co. has been organized as the Emery River Lumber Co., and has secured additional capital for pushing lumber operations. George Newhouse is president; W. L. Sessions, Jr., secretary, and R. F. Wells, manager.

Mossy Creek—Flour Mill.—J. W. Peck's new flour mill, noted lately, is to have a daily capacity of seventy-five barrels by roller process. The brick building to be used is 100x40 feet. No machinery bought yet.

Nashville—Phosphate Mill.—The Southeastern Fertilizer Co. has put in a rock emery mill for grinding Tennessee phosphate rock.

South Pittsburg—Coal Mines.—Payne & Smiley are opening new coal mines.

South Pittsburg—Machine Shop.—W. R. Bise has placed new machinery in his machine shop.

St. Elmo—Paint Mills.—Scholze Bros. have started paint mills between St. Elmo and Chattanooga.

St. Elmo—Tannery.—Scholze Bros. are erecting an addition to their tannery and building new bark shed.

TEXAS.

Austin—Bridge.—Bids will be opened August 2 for erecting a stone arch bridge; J. K. P. McFall city engineer.

Austin—Stone Quarry.—A company is about to be organized for the purpose of developing a building-stone quarry (limestone). N. V. Dittlinger can be addressed.

Bridgeport—Coal Shutes.—The Chicago, Rock

Island & Pacific Railroad Co. is building coal shutes.

Brownwood—Irrigation Plant.—The California Irrigation Co. has made a proposition to construct a plant for irrigating the Pecan valley. W. H. Clark, W. C. Parks, S. R. Coggin and others are on a committee endeavoring to meet the terms of the proposition.

Colorado—Irrigating Plant.—The business men of the city have held a meeting to further a project for building a dam across the Colorado for irrigating about 60,000 acres of land. The engineer of the Austin dam has been engaged to make a survey and estimate on cost of such a dam.

Corpus Christi—Publishing.—J. E. Polk has commenced the publication of a newspaper.

Corsicana—Barrel Factory.—The Corsicana Cotton Oil Co. will erect a factory for the manufacture of barrels and equip it with the latest improved machinery.

Dallas.—John M. Avery, Thomas Scurry and Charles C. Cobb have incorporated the Texas Blackland Mortgage Co. with a capital stock of \$50,000.

Ferris—Educational.—W. W. Batcheler, T. J. Weatherford and others have incorporated the Ferris Institute with a capital stock of \$10,000.

Fort Worth—Manufacturing, etc.—W. K. Gordon and R. H. Word, of Thurber; R. D. Hunter, H. C. Huntington, S. Mims, W. T. Newby and H. K. Thurber, of Fort Worth, and others have incorporated the Texas Pacific Mercantile & Manufacturing Co. of Fort Worth with a capital stock of \$20,000. Branch houses will be established in Eastland, Palo Pinto and Erath. The company's purpose is to construct telephone lines, supply light and heat, etc.

Greenville—Ice Plant.—King & Murphy contemplate doubling the capacity of their ice plant.

Greenville—Electric-light Plant.—The city is enlarging its electric-light plant.

Hillsboro—Gin Works.—There is a strong probability of a cotton-gin manufactory being established. G. H. Hodge can be addressed.

Houston—Cigar Factory.—W. H. Ernest, of Temple, has removed his cigar factory to Houston and will enlarge operations.

Houston—Machine Shop.—N. F. Rachel and Otto Arnold have started a shop for the manufacture of a ditching machine.

Kosse—Mercantile.—R. B. Hunt and others have incorporated the Kosse Exchange of Limestone County to transact a mercantile business, with a capital stock of \$10,000.

Long View—Saw Mill.—Brown & Flewellen will rebuild their burned saw mill.

Lott—Water Works.—The Lott City Water Co.'s works, lately noted, are being pushed to completion. Reservoir is now complete, mains are being laid and the machinery is being received.

Mineral Wells—Manufacturing.—It is contemplated to establish a factory for making crystals from the mineral waters of the wells at Mineral Wells.

Rockdale—Lignite Briquette Plant.—The annual meeting of the Rockdale Mining & Manufacturing Co. was held on September 25. All arrangements have been completed for the erection of a briquette plant to compress the lignite which the company is now mining; A. B. Kerr, president.

Sulphur Springs—Electric-light and Water Works.—The city is negotiating with a contractor for water works and electric-light plant. Address the mayor.

Strawn—Coal Mines.—Arrangements have been made to sink coal shafts near Strawn.

Temple—Water Works.—A new company may be organized to construct water works. It is proposed to put a pump in the artesian well now flowing 100,000 gallons daily.

Uvalde—Guano Mine.—It is reported that a guano mine will be developed near Rock Springs by a Baltimore (Md.) fertilizer company. Mr. West of Uvalde, and Colonel Helm, of Austin, are said to be interested.

Waco—Elevator.—Capitalists from Philadelphia contemplate erecting a pecan elevator at Waco. Charles Hamilton may possibly be able to give information.

Waco—Cotton Mills.—T. H. Dodge, secretary and treasurer of the Fonda Cotton Mills Co., of Maumee, Ohio, has been visiting Waco and other Texas cities relative to choosing a location for cotton mills. It is proposed to move the Maumee plant of 5000 spindles to the cotton-fields.

Waxahatchie—Laundry.—J. S. Newman, late of Anniston, Ala., will start a laundry in Waxahatchie.

VIRGINIA.

Alexandria—Telephone Company.—The Southern Harrison Telephone Co. has been incorporated with a capital stock of \$100,000. S. W. Tulloh is president; W. H. B. Stout, vice-president, and S. H. Merrill, secretary-treasurer.

Bedford City—Water Works.—At the election held on September 25 it was voted to issue \$10,000 in bonds to increase the city water supply; also

\$10,000 of general improvement bonds. Address the mayor.

Berkley—Cigar Factory.—Jesse Davis will start a cigar factory.

Berryville—Flour Mill.—L. R. Dettra will erect a flour mill.

Buena Vista—Iron Works.—Pursuant to a decree of the Circuit Court, the Alex. K. Rarig Co. now has its foundry, machine shop and boiler works property without encumbrance. Negotiations for removing the plant are in progress, but the plant may stay in Buena Vista.

Buena Vista—Furnace Sale.—The Circuit Court of Rockbridge county has directed the sale of the Buena Vista Iron Co.'s property, including the furnace, unless in sixty days the company pays a debt of \$200,000 to the Fidelity Insurance Co.

Chase City—Tobacco Factory.—W. K. Holt has prepared plans for a tobacco factory to be built by Emory & Gregory. The plans call for a four-story brick building.

Elwood—Woodworking Plant.—John A. Gum and others have formed the Elwood Manufacturing Co. to erect a plant for making barrels, boxes, crates, etc.

Fortress Monroe—Sewer System.—A sewer system will be constructed at a cost of \$75,000. The national government and the residents of the reservation will jointly pay for the work.

Fredericksburg—Electric-light Plant.—A committee is obtaining estimates on the cost of an electric-light plant for the city. Address the mayor.

Graham—Water Supply.—The Norfolk & Western Railroad Co. will extend its water main from Graham to Bluefield, W. Va.

Houston—Flour Mill.—The Panister Mills Manufacturing Co. expects to build a 50-barrel flour mill.

Norfolk—Canal.—The Drummond Water & Canal Co. is about to expend \$1,200,000 to widen and deepen the Deep Creek & Albemarle Canal.

Norfolk—Woodworking Plant.—The Farmers' Manufacturing Co. has commenced the erection of an addition to its factory. The new building will be four stories high, 50x100 feet, and will be used for manufacturing strawberry crates.

Norfolk—Wood Mill.—A report from Chattanooga says that Edward Scott, of Lookout Mountain, Tenn., is negotiating with English capitalists for the sale of his patent machine for cutting kindling wood. The capitalists' intention is said to be the establishment of a mill at Norfolk to supply Europe.

Norfolk—Stencil Works.—S. B. Turner & Co. have completed an addition to their Phoenix Stencil Works for the manufacture of rubber stamps, brass checks and seal presses.

Petersburg—Granite Quarries.—The Petersburg Granite Co. has been granted a charter, its purpose being to develop granite quarries, etc.; capital stock placed at \$5000. W. E. Dibble is president and secretary; H. J. Chapman, vice-president and treasurer.

Petersburg—Granite Quarries.—The Petersburg Granite Quarrying Co. has resumed regular operations.

Portsmouth—Association.—A charter has been granted to the Musical and Literary Society with a capital stock of \$5000; Wm. P. Bowers, president.

Norfolk—Publishing.—A charter has been granted to the Pilot Publishing Co. for printing and publishing purposes; capital stock to be not less than \$5000 nor more than \$15,000. Luther Sheldon is president; K. V. Zachary, vice-president, and W. B. Wilder, secretary, treasurer and general manager.

Portsmouth—Lumber Plant.—It is said that Frank Hitch, of Hamilton, N. C., will locate a lumber plant in Portsmouth.

Rapps Mills—Stone Quarry.—James Kimberlin, of Cincinnati, is opening a stone quarry on land recently purchased near Rapps Mills. Shipmen's have been commenced.

Richmond—Tobacco Company.—The Cooper-Crews Berger Co. has been chartered, its purpose being to deal in tobacco, conduct warehouse, etc. S. S. Berger is president; E. H. Crews, vice president; J. Colin Neal, of Manchester, secretary, and L. E. Cooper, treasurer; capital stock not less than \$5000 nor more than \$20,000.

Richmond—Lumber Company.—A. L. and F. A. Shepherd, T. E. Stage, J. S. Robertson and E. M. Foster have incorporated the A. L. Shepherd Lumber Co. with a capital stock of \$10,000.

Saltville—Alkali Works.—The Mathieson Alkali Co. is putting in vertical emery mills made by the Sturtevant Mill Co., of Boston.

Staunton—Novelty Works.—John Krieger will rebuild his burned curtain-pole factory, which was valued at \$30,000.

WEST VIRGINIA.

Algoma—Coaling Plant.—The Norfolk & Western Railroad Co. (office, Roanoke, Va.) will erect a coaling station at Algoma.

Belington—Woodworking Factory.—W. S. Teter will build a spoke and handle factory.

Burning Springs—Oil Wells.—A dispatch from Parkersburg states that the Virginia Oil Co.,

backed by Toledo (Ohio) capital, will soon begin operations in the Burning Springs field.

Central City—Glass Works.—The Huntington Glass Works will resume at once, and possibly the Central City Glass Works also. It is stated that both concerns will be under one management.

Charleston—Dye and Extract Works.—The Tanners & Dyers' Extract Co. is about to let contract for rebuilding its plant. W. P. Stine is manager.

Charleston—Electric Power Plant.—A. O. Patton, W. W. Tompkins, W. F. Scott, T. F. Snyder and M. Levi, of Charleston; Charles M. Reed, of Baltimore, Md., and A. McClintock, of Philadelphia, have incorporated the Great Kanawha Falls Water-Power, Electrical, Manufacturing & Land Co. with a capital stock of \$2,500,000. The company's intention is to build a big electrical plant at the Great Kanawha Falls, where there is a powerful water-power, and electricity is to be transmitted to factories, mines, etc.

Clinton Furnace—Flour Mill.—O. A. Johnson is changing his burr mill to the roller system.

Coketon—Lumber Manufacturing, etc.—Wm. M. and Mrs. Susan Phillips, of Alexandria, Pa.; Saml. R. and Mrs. M. B. Shumaker, of Huntingdon, Pa.; Tobias and Mrs. Louisa Snider, of Coketon, have incorporated the Coketon Lumber Co. to manufacture and deal in lumber; capital stock \$100,000.

Jumping Branch—Saw Mill, etc.—W. W. Warren will rebuild his burned saw mill and put in a corn mill as soon as financial arrangements can be completed.

Morgantown—Flour Mill.—John H. Hoffman will change his burr flour mill to the roller system.

Piedmont—Machine Shops.—Taylor Souders, J. C. Kuhle, Elmer Rowe and Mr. Smith have leased and will operate the machine shops of the Twin Towns Manufacturing Co.

Point Pleasant—Furniture Factory.—There is talk of the Sterling Furniture Factory being put in operation.

Upland—Coal Mine.—The Upland Coal & Coke Co. has begun operations at No. 2 drift, recently opened.

Wellburg—Cannery.—The establishment of a canning factory is talked of. J. E. Curtis can be addressed.

Wheeling—Telephone System.—The People's Telephone Construction Co. has been granted franchise to construct a telephone system; W. D. Johnson is secretary.

Wheeling—Coal Tipples.—The Boggs Run Coal Co. is equipping its tipple with machinery.

Wheeling—Flour Mill.—It is proposed to build a flour mill of 500 barrels capacity per annum.

Wheeling—Smelting Company.—A charter has been issued to the American Electric Smelting Co. with a capital authorized at \$1,000,000. The incorporators are John A. Campbell, Charles Merkemeller and T. H. B. Haas, of Wheeling; Robert C. Haas, of Bellaire, Ohio, and J. B. Hall, of Allegheny, Pa.

Winona—Coal Mines.—The Smokeless Coal Co. has been incorporated for the purpose of mining coal. The incorporators are J. D. Campbell, E. W. Bridges, S. E. Turner and C. E. Thompson, of Claremont, and J. C. Henry, of Springdale; capital stock \$10,000.

BURNED.

Birmingham, Ala.—Rube Lewis's sausage factory.

Blakely, Ga.—W. H. Stuckey's saw mill, grist mill and cotton gin.

Cleveland, Tenn.—The Benton county court-house.

Cordele, Ga.—The Tomney Hotel.

Covington, Ga.—W. G. Sockwell's machine shops.

Daleville, Ark.—The Arkadelphia Lumber Co.'s mill, said to be the largest in the State; loss \$50,000.

Eddyville, Ky.—The broom and shoe factories at the State Penitentiary owned by the Mason & Ford Co.

Fayetteville, Ark.—Buildings belonging to Baum & Bro., E. B. Harrison and others; loss \$100,000.

Fayetteville, Ark.—Baum & Bros' warehouse and other buildings; loss \$75,000.

Floyd, Texas.—Wylie & Lokey's cotton gin, near Floyd.

Georgia.—A cotton gin in Georgia, owned by Foy Bros., of Eufaula, Ala.

Gilmer, Texas.—The Tyler Star Lumber Co.'s dry-kiln.

Gulf, N. C.—Jordan & Co.'s saw mill; loss \$800.

Judge's Siding, Ala.—W. D. Judge's cotton gin.

Keatchie, La.—J. T. Rushing's grist mill and gin.

Lakeland, Fla.—Broward's wagon shops and Baldeck's Opera-House.

Lexington, Va.—The tank of the Lexington Ice Factory burst on the 1st inst. and was entirely destroyed.

Longview, Texas.—Brown & Flewellen's saw mill.

Louisville, Ky.—W. H. Muscroft's planing mill, etc.; loss about \$600.

Raleigh, N. C.—J. A. Basinger's whiskey distillery, in Stanley county.

Shubuta, Miss.—W. M. Smith's cotton gin, near Shubuta.

Staunton, Va.—John Kroder's curtain-pole factory; loss \$30,000.

Weatherford, Texas.—The Planters' Oil Mill Co.'s seed warehouse, including valuable machinery for handling grain.

Windsor, S. C.—R. B. Armstrong's cotton gin.

BUILDING NOTES.

Abbeville, S. C.—Warehouse.—W. J. Smith & Sons have commenced the erection of a brick warehouse.

Anniston, Ala.—Hotel.—Contract for remodeling the McKleroy Building into a hotel has been let to Thos. L. Houser & Co. and work has been commenced. I. W. Gasser will lease the building.

Atlanta, Ga.—Business Building.—Collier Bros. are erecting a three-story business block to cost \$6000.

Atlanta, Ga.—Theatre.—Henry Greenwall, of New Orleans, has leased the Edgewood Theatre in Atlanta, and will expend \$40,000 or \$50,000 in remodeling same.

Baltimore, Md.—Church.—Work has been commenced on the Frederick Rice Memorial Building, which is to cost \$6000; Edgar M. Noel, contractor.

Baltimore, Md.—School.—Contract for building English-German School No. 1 has been awarded to J. B. Veatman at \$26,600.

Baltimore, Md.—Asylum Buildings.—The new State Insane Asylum directors have organized with Frank Brown as president and Richard M. McSherry, secretary; the directors are now discussing plans for the erection of buildings for the new asylum, \$75,000 for which has been appropriated by the legislature.

Baltimore, Md.—Geo. A. Frederick has obtained permit to build a four-story building.

Baltimore, Md.—Barn.—The Baltimore City Passenger Railway Co. has obtained permit to build a one-story brick, stone and iron barn 75x379 feet.

Baltimore, Md.—Barn.—The City Passenger Railway Co. has commenced the erection of its \$30,000 car-barn. J. H. & J. R. Adams are the builders.

Baltimore, Md.—Warehouse.—The Security Storage & Trust Co., incorporated with a capital stock of \$100,000, will erect a seven-story warehouse.

Bridgeport, Ala.—Depot.—The Nashville & Chattanooga Railroad Co. will build a new passenger depot.

Bridgeport, Ala.—School.—A \$15,000 stock company has been formed to erect a handsome stone building to be used as a Vanderbilt training-school. This school has the endorsement of the Vanderbilt University of Nashville, Tenn. R. C. Johnson can be addressed.

Carrollton, La.—Church.—A new church building to cost \$10,000 will be built for Carrollton Presbyterian congregation. Alexander Hay, of 74 Baronne street, New Orleans, prepared the plans.

Clayton, Ala.—School.—A new school building is to be erected.

Cleburne, Texas.—City Hall, etc.—The city contemplates building a city hall and market-house.

Corinth, Miss.—School.—The city will open bids on October 12 for the erection of a school building; Weathers & Shaw, architects, Memphis, Tenn.; S. L. Ward, city clerk.

Dallas, Texas.—Business Building.—A. A. Jackson is reported as to erect a two-story brick store, 100x150 feet.

Dallas, Texas.—Business Building.—The Southern Rock Island Plow Co. has purchased site for \$9000 upon which it will erect a six-story and basement business building, 100x100 feet.

Drennon Springs, Ky.—Hotel.—The Drennon Springs Hotel Co. will erect a hotel two stories high, 131x50 feet, to cost \$7000. M. Q. Wilson, of Louisville, has prepared plans.

Elkhorn, W. Va.—Church, etc.—The Houston Coal & Coke Co. will erect a church and hall building.

Fort Worth, Texas.—Church.—The new building for the Missouri Avenue M. E. Church will shortly be let to contract; separate bids are to be received for the brick, stone and other work. The building is to cost about \$16,000. Address the trustees.

Fort Meade, Fla.—Hotel.—A hotel and sanitarium, two stories high, 150x50 feet, with all modern improvements, will be built at a cost of \$20,000; C. E. Shepard, New Ridge Building, Kansas City, Mo., has prepared plans.

Georgetown, Texas.—Church.—A new structure will be built for the Christian Church.

Georgetown, Texas.—School.—Work is about to begin on the new school building; Thos. Fisher, of Austin, contractor.

Greenville, Ga.—Church.—The Methodists are

preparing for the erection of a new church building. R. N. Ellis, R. J. Atkinson and others are on the building committee.

Hagerstown, Md.—Association Building.—The erection of a Y. M. C. A. building is contemplated. Address the secretary.

Havre de Grace, Md.—Warehouse.—S. J. Seneca will erect a large warehouse 100x50 feet. Contract has been let to J. F. Woodrow.

Henderson, Ky.—F. W. Marshall will build a tobacco-house two stories high, 54x167 feet, with freight elevator, etc., at a cost of \$8000. Tripple & Son have prepared plans.

Houston, Texas.—Dwelling.—Mrs. Jane F. Brown has obtained permit for repairs to dwelling to cost \$4500.

Houston, Texas.—Church.—Contract for erecting new building for the Church of the Annunciation has been let to Macon & Crowley at \$7000.

Karnes City, Texas.—School.—Contract for building the school, lately noted, has been let to Mr. Schott, of Kerville; the building is to cost \$5000.

Lake Charles, La.—Store.—Work has commenced on a store building for Mrs. Sam Marx.

Lawrenceburg, Ky.—Bank Building.—The Lawrenceburg Bank will erect a new two-story bank and flats building, 20x57 feet, at a cost of \$1500. V. P. Collins, of Louisville, has prepared plans.

Leesburg, Fla.—Church.—The trustees of the Episcopal church have purchased lot on which to erect new building.

Lexington, Ky.—Church.—F. L. & E. W. Smith have prepared plans for a church to be built at a cost of \$20,000; the building is to contain all the latest improvements.

Lincolnton, Ga.—School.—A two-story school building is to be built at a cost of \$5000 to \$6000. Address the mayor.

Louisville, Ky.—Hotel.—The Louisville Hotel Co. will expend \$5000 in remodeling a hotel.

Louisville, Ky.—Convent.—D. X. Murphy has completed plans for the new convent to be built for the Sisters of the Good Shepherd at a cost of \$30,000.

Louisville, Ky.—Church.—Chas. D. Myers, Norton Building, has prepared plans for the new Trinity English Lutheran Church, to be built of common and pressed brick, with incandescent lighting, etc. Its cost is to be \$10,000.

Louisville, Ky.—Dwellings.—Building permits have been issued to Ben Droppelmann for a \$3000 residence, to T. H. Glover for a \$6000 residence, and to Mrs. L. Rhodes for a \$6000 residence.

New Orleans, La.—Sanitarium.—Chas. J. Keyes has prepared plans for a two-story sanitarium 100x80 feet, to be built at a cost of \$15,000.

New Orleans, La.—Depot.—The Queen & Crescent Railroad will erect a new depot to replace one recently burned.

Ninety-Six, S. C.—Cottage, etc.—John Fouché is erecting a cottage and making arrangements to build a brick store.

Nocona, Texas.—School.—Bids will be received by the mayor until October 5 for erecting the proposed new school building for the city; J. J. Kane & Son, of Fort Worth, architects.

Orlando, Fla.—Bank Building.—The First National Bank has purchased site and will erect a bank building. Plans are being prepared.

Owensboro, Ky.—Warehouse.—R. Monarch has commenced the erection of a large frame warehouse of 15,000 barrels capacity.

Roanoke, Va.—Residence.—A. J. Evans will erect a \$3000 residence. H. H. Huggins has prepared plans.

San Antonio, Texas.—Dormitory.—The Protestant Orphans' Home will erect a dormitory building.

South Pittsburg, Tenn.—Brittain Bros. will erect a three-story brick business house.

St. Augustine, Fla.—Hotel.—Franklin W. Smith, of Saratoga, N. Y., will remodel the Arcade Villa into a hotel. Plans have been prepared, and show a building of seventy rooms.

St. Louis, Mo.—Dwelling.—Chas. E. Bradley has obtained permit to build a \$12,000 residence.

St. Louis, Mo.—Dwelling.—F. C. Sharp has obtained permit to build a \$6500 dwelling.

St. Louis, Mo.—Warehouse.—McDonald Bros., of Louisville, Ky., have prepared plans for a warehouse to be built for the Consolidated Steel & Wire Co. at a cost of \$10,000.

St. Louis, Mo.—Warehouse.—M. T. O. Allardt has prepared plans for a warehouse, 35x75 feet, two stories high, to cost \$4000.

Upland, W. Va.—School.—A new schoolhouse will be built.

Washington, D. C.—Residence.—Christian Schneider has obtained permit to build a two-story brick residence to cost \$5000.

Washington, D. C.—Flats Building.—Dr. A. B. Jameson, Pleasant Plains, will erect a three-story flats building, with all modern improvements, at a cost of \$25,000. C. E. Anderson, 934 F street, has prepared plans.

Waynesville, N. C.—Temple.—The Masons will erect a three-story temple.

RAILROAD CONSTRUCTION.

Railroads.

Aberdeen, N. C.—The Moore County Railroad is being extended five miles into the timber region. Its total length when completed will be fifteen miles. It is a standard-gauge line. W. B. Eekhout is general manager.

Bristol, Tenn.—A conference was recently held in Bristol between officials of the Chester & Lenoir Railroad (office, Chester, S. C.) and the management of the Bristol, Elizabethton & North Carolina Railroad relative to the construction of a railroad that would connect the two lines. The Chester & Lenoir extends from Chester, S. C., to Lenoir, N. C., a distance of 109 miles. The Bristol, Elizabethton & North Carolina Railroad is projected from Bristol to Asheville, N. C., a distance of eighty-nine miles, and is completed to Elizabethton, Tenn., twenty-two miles. A line about sixty-two miles long would have to be built to make the connection proposed.

Camden-on-Gauley, W. Va.—W. J. Gortner, of Sen-linsgrove, Pa., writes that the Big Laurel & Panther Creek Railroad Co. was chartered to build a railroad to develop 5000 acres of timber land owned by him on Panther creek, and will be constructed as soon as the Camden Railroad (West Virginia & Pittsburgh) is finished to Cherry river. The road is to extend from the mouth of Cherry river to Panther creek. The present terminus of the West Virginia & Pittsburgh is Camden-on-Gauley, and the company's charter permits it to build south to the mouth of Cherry river, a distance of about ten miles, but nothing has been done as yet towards such an extension.

Corsicana, Texas.—Regarding the financial status of the Corsicana & Southeastern Railroad, the MANUFACTURERS' RECORD has information from a reliable source that \$100,000 in the way of bonds and bonus have been subscribed by responsible parties of Corsicana and Fairfield. This seems to indicate that the enterprise will be carried out. C. W. Coykendall is at the head of the project.

Crossville, Tenn.—It is expected to complete the grading of the Tennessee Central Railroad (office, Spring City) to Crossville by November 1. This road is projected to run from the Tennessee river to Nashville, a distance of 140 miles. Twelve miles are completed.

Elkins, W. Va.—Over 500 men are now engaged in building the Roaring Creek & Charleston Railroad under the supervision of C. J. McDonald, of Elkins.

Joplin, Mo.—The Southwestern Mineral Railroad Co. has been chartered with a capital stock of \$600,000 by directors of the Missouri, Kansas & Texas Railroad. The road is expected to be built within a year, and will extend from Joplin to Parsons, Kans. Thos. C. Purdy, of St. Louis, vice-president and general manager of the Missouri, Kansas & Texas, can probably give information.

Little Rock, Ark.—The Little Rock Bridge & Terminal Co., of which J. M. Rose is secretary, will amend its charter, extending its line so as to belt the city of Little Rock. It is believed that the Little Rock & Memphis Railroad Co. will furnish the funds to carry out the bridge and railroad projects of the terminal company. James H. Smith, of New York city, a director in the Little Rock & Memphis Railroad Co., states that the owners of his road expect to control the terminal company; also that it has in contemplation the construction of a line which will be virtually an extension of their present road and be controlled by the company, from Little Rock to Wister Junction, I. T. At this point it will secure connections with the St. Louis & San Francisco and Choctaw Coal & Iron Railroads. The latter, in turn, is to be extended from South McAlester to Oklahoma City and from El Reno to Albuquerque, N. M., and there connect with the Santa Fe system, giving a through route to the Pacific coast.

New Braunfels, Texas.—Referring to the railroad project in which Joseph Landa was noted as interested, Harry Landa writes to us as follows: "We will in a very short time organize a company for the purpose of building a railroad from here to Marion and from thence to Floresville, crossing the Southern Pacific, the proposed Gulf Shore, and connecting with the Aransas Pass at Floresville. It will be sixty or ninety days before the enterprise will assume a tangible shape." The Messrs. Landa operate flour mills, cottonseed-oil mill and electric-light works in New Braunfels and are large property-holders.

Round Mountain, Ala.—Contract has been awarded to E. G. Frank, of Oxford, Ala., for building the four-mile branch of the Chattanooga Southern Railroad. It runs from the main line to Round Mountain, and will cost about \$25,000. George C. Ball & Co., of Atlanta, Ga., have contract for rails, etc.

Sanford, N. C.—The only connection of the Loblolly Car Wheel Co., of Wilmington, Del., with the proposed railroad from Sanford to Lillington is that the company is interested in considerable timber land there, and has agreed to give the railroad the right of way, also to sell the projectors the timber on the property at a fixed

sum. B. S. Jerman, of Raleigh, N. C., can give information regarding the enterprise.

San Antonio, Texas.—The tracklaying on the San Antonio & Gulf Shore line is expected to begin about October 15 at this place. A quantity of rails and ties have already been received for the line. Two locomotives have been purchased for the road.

Shreveport, La.—The Kansas City, Shreveport & Gulf Railway Co. has been incorporated to build a railroad from a point on the Arkansas State line, on the north boundary of Caddo parish, via Shreveport in a southerly direction to a point at or near Sabine Pass. The incorporators are William S. Taylor, of Kansas City, Mo.; A. E. Stillwell and E. L. Martin, of Kansas City, Mo.; Fred. B. Hubbell, of Texarkana, Texas, and others. The capital stock is \$1,000,000. This road will become part of the system planned by the Kansas City, Pittsburg & Gulf Railroad Co., of which Mr. Martin is president, and Mr. Stillwell, first vice-president.

Electric Railways.

Jacksonville, Fla.—The Jacksonville Street Railway Co. has closed contracts for the electrical equipment of its road.

Pikesville, Md.—The Pikesville, Reisterstown & Emory Grove Railroad Co. has secured right of way to construct a single-track electric railway on the turnpike from Pikesville to Reisterstown, a distance of about twelve miles.

Richmond, Va.—The Richmond Railway & Electric Co. will likely extend and equip its Broad-street line with electricity if it secures an extension of its franchise.

Sherman, Texas.—It is stated that the College Park Rapid Transit Co. has sold its electrical railroad to a syndicate which will build ten miles of additional road.

Washington, D. C.—The Metropolitan Street Railway Co. has decided to adopt the underground electric system of the General Electric Co. for the operation of its electrical railroad. A. N. Connett is engineer in charge.

MACHINERY WANTED.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Air Compressor.—The Culver Stone Co., Springfield, Ill., is in the market for an air compressor.

Boiler.—See "rock drill."

Boiler.—The Crystal Ice Factory, North avenue and Chester streets, Baltimore, Md., wants a 100 horse-power boiler.

Boiler and Sheet-iron Works.—The Stokes Boiler & Sheet Iron Manufacturing Co., P. O. Box 465, New Orleans, La., wants complete outfit for boiler and sheet-iron works; Alphonse Marx, president.

Cement Works.—The White Cliffs Portland Cement & Chalk Co., of Arkansas, expects to be in the market in the near future for cement works and machinery for other manufacturing plants; L. Metesser, president, New Orleans, La.

Cider Mills.—John Dump, Elizabethton, Tenn., wants prices on cider mills.

Corn Mill.—J. W. Peck, Mossy Creek, Tenn., wants a corn and cob crusher.

Cotton-mill Supplies.—The Gastonia Hardware Co., Gastonia, N. C., wants to correspond with manufacturers of cotton-mill supplies.

Crusher.—The Wright Phosphate Co., Newtown, Fla., wants to buy a No. 1 Gates crusher; must be second-hand, in good condition and at a low price.

Dynamo.—Jas. T. Searcy, Jr., Tuscaloosa, Ala., is in the market for a 50-light incandescent dynamo.

Engine.—Ed Zarth, Gonzales, Texas, wants a 4x5 or 6-inch engine, second-hand and cheap; engine need not be in best of order, as it would be used for a short time only.

Flour Mill.—J. W. Peck, Mossy Creek, Tenn., will want a full line of roller-process machinery for 75-barrel flour mill.

Gasoline Engine.—E. A. Cutting, Middletown, Va., wants to buy a petroleum or gasoline engine not over four horse-power, either new or second-hand, for cash.

Handle Machinery.—J. Hunsucker, Conover, N. C., wants to buy a handle lathe, new or second-hand.

Heating Apparatus.—Heating apparatus will be needed. Address W. L. Mayo, Commerce, Texas.

Heating Plant.—Jas. T. Searcy, Jr., Tuscaloosa, Ala., is in the market for the cheapest method of heating a small mill driven by water.

Hoisting Plant.—The Bethesda Mining Co., 412 East Lombard street, Baltimore, Md., wants a double-cylinder steam hoist for mine shaft; second-hand one will do.

Hose.—D. M. Miller, Salisbury, N. C., wants to buy from 300 to 500 feet of good hose for city fire department.

Ice Cans.—The Schmulbach Brewing Co., Wheeling, W. Va., will need ice cans.

Lathe.—The Culver Stone Co., Springfield, Ill., is in the market for a eight-foot 20 to 24-inch-swinging lathe.

Laundry Machinery.—Sealed proposals will be received until October 30 for furnishing laundry machinery for the United States Marine Hospital at San Francisco, Cal. Address Chas. E. Kemper, acting supervising architect, Washington, D. C.

Lighting Apparatus.—Lighting apparatus may be needed. Address W. L. Mayo, Commerce, Texas.

Lumber-mill Machinery.—The Windermere Investment Co., Windermere, Fla., needs lumber-mill machinery.

Naphtha Boat.—A. C. Wagner, 514 Walnut street, Philadelphia, Pa., wants a naphtha boat from twenty-one to thirty feet.

Naphtha Launches.—The Little Rock Ferry & Transportation Co., Little Rock, Ark., needs two naphtha launches, with suitable machinery.

Piping, etc.—The Schmulbach Brewing Co., Wheeling, W. Va., will need piping and valves for ammonia use.

Planer.—F. S. Tait, Rock West, Ala., wants a planer to be run by sixteen horse-power engine and boiler.

Planer.—The Culver Stone Co., Springfield, Ill., is in the market for a second-hand iron planer 8x24x24.

Planing and Matching Machinery.—W. R. Reel & Bro., Reelsboro, N. C., want prices on planing and matching machinery f. o. b. Baltimore, Md.

Pump, Ram and Sprinklers.—Jas. T. Searcy, Jr., Tuscaloosa, Ala., is in the market for a force pump, hydraulic ram and automatic sprinklers.

Quarrying Machinery.—N. V. Dittlinger, Austin, Texas, wants to correspond with manufacturers of quarrying machinery.

Rails.—C. L. Wilson, Buchanan, Va., wants to buy second-hand 20-pound steel rails and fastenings to lay three-quarters of a mile of track.

Riding Galleries.—S. E. Ross, Conicville, Va., wants to correspond with manufacturers of riding galleries.

Rock Drill and Boiler.—C. L. Wilson, Buchanan, Va., wants to buy a second-hand Sargeant-Ingersoll rock drill, with twelve horse-power boiler, in good condition.

Roofing, etc.—E. Walker & Co., Bosworth, Mo., will buy roofing and siding for a building 40x40x75 feet.

Saw-mill Machinery.—W. W. Baldwin, Camden-on-Gauley, W. Va., is in the market for latest-improved portable saw-mill machinery.

Shingle Mill.—F. S. Tait, Rock West, Ala., wants a shingle mill of 10,000 to 20,000 capacity daily; automatic feed.

Sour-kraut Machinery.—J. W. Wofford, Hendersonville, N. C., wants to buy machinery for manufacturing sour kraut.

Stone Saws.—The Culver Stone Co., Springfield, Ill., is in the market for two gangs of stone saws, Merriman screw-feed preferred, and a power rubbing bed.

Sugar-mill Machinery.—John Dump, Elizabethton, Tenn., wants prices and information on cane crushers and evaporators.

Tanks.—The Schmulbach Brewing Co., Wheeling, W. Va., will need two large iron tanks.

Telephone Equipment.—J. M. Ragsdale, Waxahatchie, Texas, will contract for insulators, cross-arms and poles for a 100-phone plant.

Telephone Equipment.—Wm. Campbell, Charleston, W. Va., wants estimates on a telephone equipment to connect half a dozen points one-quarter of a mile apart.

Traveling Crane.—The Schmulbach Brewing Co., Wheeling, W. Va., will need a traveling crane.

Wood-pulp Machinery.—F. Jos. Hammelmann, Hotel Vendig, Twelfth and Market streets, Philadelphia, Pa., wants a list of wood-pulp-utensil manufacturers.

Woodworking Machinery.—The Windermere Investment Co., Windermere, Fla., needs machinery for manufacturing boxes and crates.

Benj. P. Holland, Atlanta, Ga., wants to correspond with users of asbestos in its virgin state.

C. A. Someilan, Tallahassee, Fla., wants to buy matting and burlap.

TRADE NOTES.

MINNEAPOLIS, MINN., recently placed an order for a Gleason & Bailey modern hand fire-engine outfit.

THE M. A. Furbush Machine Co., of Philadelphia, Pa., manufacturer of textile machinery, is delivering ten broad blanket looms to J. & J. Dobson, Philadelphia.

DURFEE MILLS, of Fall River, Mass., has placed an order with the Pettie Machine Works, of Newton Upper Falls, Mass., for eighty-five of the latest improved revolving flat cards.

J. P. & E. K. RAY, of Woonsocket, R. I., have placed their order for revolving flat cards and railway heads for their Ballou Mill with the Pettie Machine Works, Newton Upper Falls, Mass.

CONTRACT has been awarded to the Atlanta (Ga.) office of George C. Ball & Co., railway supplies, for furnishing the rails etc., for the Alabama extension of the Chattanooga Southern Railroad.

H. ASHTON RAMSAY, of Baltimore, Eastern agent of the Youngstown Bridge Co., has recently closed the contract for the Columbia avenue bridge in Baltimore, which is a very heavy three-truss structure, and also for dams Nos. 9, 10 and 11 for the United States government on the Great Kanawha river.

RECENT orders received by the Bunch & Yates Co., Memphis, Tenn., included a 15-ton standard-gauge locomotive and trucks and fittings for six logging cars for the Pond-Decker Lumber Co., Deckerman, Ark.; 25-ton narrow-gauge locomotive and eighteen logging cars for the Arkansas County Lumber & Stave Co.

THE patent rights, franchises, etc., of "Coraline," an important agent in the brewing of malt liquors, as well as a food product, together with an outfit of machinery, will be sold at public auction at the company's mill, 264 Buchanan's wharf, Baltimore, on October 10. A card in another column gives further particulars.

A NOTICEABLE feature of the past few months in woodworking machinery is the rapid introduction of the band resaw made by the J. A. Fay & Egan Co., of Cincinnati, Ohio. In explanation of this it is stated that with the ribbon blade there is less friction and no heat, and consequently better work and more of it is turned out.

THE Lidgerwood Manufacturing Co., New York and Chicago, finds a good demand for its cableways. There are now eighteen of these outfits employed on the Chicago drainage canal. Those interested should send for the company's little book "Cable Sketches" (second edition). It is finely illustrated and may be had for the asking.

THE Chattanooga Steel Roofing Co., Chattanooga, Tenn., is enjoying an unusual large demand for its line of goods. This company's large plant is running full in every department, filling orders from every section in the South for its patent steel roofing and other styles of steel and iron-roofing and galvanized-iron work, such as cornices, window caps, skylights, gutters, eave-through pipes, finials, cresting, etc. This is a Southern enterprise, and its success proves what can be accomplished in the South in the way of manufacturing when conducted on business principles by experienced management.

TABLE OF CONTENTS.

	Page.
"Facts About the South."	141
EDITORIAL.	
Transmitting Electric Power	141
The South Receiving Attention	141
Why Southern Mills Prosper	141
C. P. Huntington's Views	142
South Carolina Wants Immigrants	142
Jacksonville's New Oil Mill	142
The Nicaragua Canal	142
Brice-Thomas Interested	143
Newspaper Wanted	143
Seven Acres of Shops	143
The Manufacture of Coke	143
Large Land Sale	143
RAILROAD NEWS:	
Important Railway Deal	144
Georgia Southern & Florida Reorganization	144
Small, But It Pays Dividends	144
From Memphis to the Pacific	144
Southern Railway Bonds	144
Southern Railroad Notes	144
Complete and Ornate Offices	144
FINANCIAL NEWS:	
New Financial Institutions	144
New Bond and Stock Issues	144
Interest and Dividends	144
MECHANICAL:	
A New Vertical Engine (Illus.)	145
Steam; Its Generation and Use	145

TEXTILES:	
Fine Cotton Goods Must Be Made	146
Speculative and Statistical Features of Cotton	146
A Sample Southern Cotton Mill	146
Increasing Consumption of Cotton in Japan	146
Emphasizing the Need of the Nicaragua Canal	147
Cotton Conditions	147
Charlotte After Finishing Works	147
A 40,000-Spindle Mill	147
Another Cotton Mill to Go South	147
Textile Notes	147

COTTONSEED OIL:	
The Markets for Cotton seed Products	147
Cottonseed-Oil Notes	147
Life of General Lee	148

PHOSPHATES:	
Tennessee Phosphates	148
Phosphate Markets	149
Phosphate and Fertilizer Notes	149
Iron Markets	149

LUMBER:	
Be Careful to Whom You Ship	150
Lumber Market Reviews:	
Baltimore	150
Norfolk	150
Charleston	150
Savannah	150
Mobile	150
Beaumont	150
New Orleans	150
Southern Lumber Notes	151
Trade Notes	151, 155
Trade Literature	151

CONSTRUCTION DEPARTMENT:	
New Enterprises	152
Building Notes	152
Railroad Construction	154
Machinery Wanted	155

Low Rates to Washington, Saturday and Sunday, October 6 and 7.

The Pennsylvania Railroad Co. will sell from Baltimore excursion tickets to Washington, D. C., and return on Saturday and Sunday, October 6 and 7, at the low rate of \$1.25 for the round trip. Tickets good for use on all regular trains in each direction and valid for return until Monday, October 8, inclusive.

NOTICE.

BALTIMORE, September 22, 1894.

To the Bondholders of the Georgia Southern & Florida Railroad Company:

The Bondholders' Committee of the Georgia Southern & Florida Railroad Company have completed the plan for the reorganization of this property, and copies of the same can be obtained on application to any member of the committee or to the Mercantile Trust and Deposit Company of Baltimore.

Notice is hereby given to the holders of bonds who have not deposited them that the same may be deposited with the mercantile Trust and Deposit Company of Baltimore up to October 15th, 1894 at which date the pool will be closed and the committee will not undertake to represent any bonds except those deposited by that time.

H. P. SMART, Chairman,
SAVANNAH, GA.,
THOMAS B. GRESHAM,
BALTIMORE, MD.,
D. U. HERRMANN,
NEW YORK,
WM. CHECKLEY SHAW, Sec'y,
BALTIMORE, MD.,
CHARLES WATKINS,
RICHMOND, VA.,
HENRY RICE,
NEW YORK,
CHARLES D. FISHER,
BALTIMORE, MD.,
COMMITTEE.
SKIPWITH WILMER, Counsel,
BALTIMORE, MD.

Alphabetical Index of Advertisers.

FOR "CLASSIFIED INDEX" SEE PAGES 9 11 AND 13

A	Abbott B. S.	39	Charlton & Pruitt	12	Fletcher & Thomas	32	Mason Machine Works	43	Rochester Machine Tool Works	20
Adams Boiler Co.	20	Chattanooga Fdy. & Pipe Works	41	Foss Mfg. Co.	23	McBride, A. J.	26	Ross, Josiah	38	
Adams, S., & Son	39	Chattanooga Steel Roofing Co.	34	Forsyth, S. C. Machine Co.	31	McCrumb & Maxwell	25	Rowley & Hermance Co.	36	
"Aerophor"	42	Chester Steel Castings Co.	31	Forster Pulley Works	31	McCully, R.	23	Russell, W. H., Secretary	26	
Aetna Foundry & Machine Co.	40	Chicago Scale Co.	16	Foster Machine Co.	43	McDaniel & Harvey Co.	35	Russell & Minnigerode	15	
Ahrens & Ott Mfg. Co.	21	Child, Chas. T.	12	Freese, E. M., & Co.	32	McDonald, T. C., & Bro	35	Ryan-McDonald Mfg. Co.	21	
Alderman, D. W.	26	Chrome Steel Works	31	Frick Co.	19	McDowell, Hamilton	41			
Allen, Chas. A.	48	Church, Isaac	15	Frictionless Metal Co.	2	McEwen, J. H., Mfg. Co.	18	S		
Allington & Curtis Mfg. Co.	32	Cincinnati Machinery Co.	26	Frisbee Lucop Mill Co.	22	McGowan, John H., Co.	40	Sanderson, John	12	
Almy Water Tube Boiler Co.	18	Cincinnati Milling Machine Co.	30	Fritz, Geo. J.	33	McLanahan & Stone	19	Sargent, J. Bradford	19	
Alsing, J. R., Co.	22	Clapp, Geo. M.	27	Froehling, Dr. Henry	12	McNaull, W. D.	24	Saunders, D., Sons	30	
American Bridge & Iron Co.	46	Clapp & Co.	25	Frontier Iron Works	39	McNeill, J. C., Co.	15	Scalfe, Wm. B., & Sons	17	
American Hoist & Derrick Co.	15	Clark, Geo. P.	14	Fulton Stm. Boiler Wks. & Fdy.	18	Mecklenburg Iron Works	22	Schieren, Chas. A., & Co.	46	
American Imp. Anti-Frict. Met. Co.	10	Clark, M., & Co.	12	Furbush, M. A., & Son Mch. Co.	42	Mercantile Trust & Deposit Co.	25	Schmitz, E. J.	19	
American Promoting & Trust Co.	28	Clark, W. J., & Co.	22			Mercant & Co.	34	Schofield's Iron Works	12	
American Screw Co.	48	Clarke, Wm. Wirt, & Son	12	G		Mechanics & Miners' Transp. Co.	47	Schofield, G. W., & Co.	26	
American Ship Windlass Co.	31	Cleveland & Buffalo Line	44	Gainesville Iron Works	22	Middleton, Oliver & Co.	16	Seeley, Elisha B., & Co.	47	
American Spiral Spring Co.	14	Cleveland, Canton & Southern R. R.	*	Gandy Belting Co.	17	Miles, Frank T., Co.	39	Shawhan-Thresher Electric Co.	47	
American Supply Co.	*	Cleveland, Lorain & Wheeling R. R.	*	Garland Chain Co.	12	Miller, L. J.	22	Shimer, Samuel J., & Sons	39	
American Tool Works	27	Cleveland Twist Drill Co.	2	Gascoyne, Dr. W. J.	12	Miller, Lewis J.	21	Shultz Belting Co.	17	
American Well Works	40	Cocker, Wm.	39	Gate City Electric Supply Co.	47	Miller, O. A.	34	Sibell, G. H., & Co.	27	
Anderson Cathedral Glass Co.	34	Cohen, Hermann, & Co.	25	Gates Iron Works	22	Mills Wool & Leather Co.	42	Sims Co., Ltd.	27	
Aragon Hotel	*	Cohoes Iron Fdy. & Mch. Co.	43	General Fire Extinguisher Co.	15	Milner & Kettig Co., The	2	Sinclair, S. H., Co.	41	
Arcade File Works	48	Coleman, H. Dudley, Mch. Co.	39	Getty, Geo. A., etc.	26	Milton Mfg. Co.	31	Situations Wanted	28	
Armitage-Herschell Co.	46	Columbia Corrugating Mfg. Co.	34	Gilchrist, Peter S.	12	Miningerode, Wm.	27	Slater Engine Co.	18	
Armstrong Bros.	15	Columbus Iron Works Co.	33	Glascock & Co.	15	Monash, C. P., Manager	15	Slattington Bangor Slate Syndicate	48	
Art Embossing Machine Co.	10	Commercial Club	45	Gleason & Bailey Mfg. Co.	15	Monroe Mfg. Co.	15	Smith-Courtney Co.	27	
Artesian Well Drilling Co.	40	Consolidated Roofing Works	*	Glen Cove Machine Co., Ltd.	38	Monroe Metal Roofing Co.	35	Smith, S. Morgan	41	
Asbrand, C. W.	34	Contractors' Plant Mfg. Co., Ltd.	15	Globe Mineral Wool Co.	16	Moore Mfg. & Foundry Co.	15	Smith & Kilby Co.	27	
Atkins, E. C., & Co.	37	Corbett Mill & Machine Co.	28	Godfrey, L., Machinery Agency	26	Moore, Morton K.	27	Smith & Thompson	12	
Atkins, Jos. L.	15	Cordesman, Meyer & Co.	38	Golden's Foundry & Machine Co.	32	Moore, William & Co.	10	Smith Sons Gin & Machine Co.	43	
Atlanta Terra Cotta Co.	12	Corres. School of Industrial Science	15	Goodell & Stewart	12	Morse, Williams & Co.	10	Smithers, H. F.	43	
Atlas Engine Works	18	Cortright Metal Roofing Co.	34	Goodell & Waters	35	Mortimer, Reed & Co.	43	Solomon, Chas. S., Co.	26	
Austen, Peter T.	12	Cotter, W. T.	15	Gordon Hollow Blast Grate Co.	20	Moye, Robert L., Mayord	43	Southern Iron & Equipment Co.	29	
Austin, F. C., Mfg. Co.	46	Covert Mfg. Co.	46	Graham, J. S., & Son	42	Mueller, H., Mfg. Co.	21	Southern Lumber Directory	27	
		Covington, John I.	*	Gravity Purifier Co.	14	Mundt & Sons	17	Southern Pacific Co.	*	
B		Covington Machine Co.	23	Greaves & Klusman	39	Murphy, John, & Co.	16	Southern Queen Mfg. Co.	26	
Babcock & Wilcox Co.	19	Crews & Westbrooks	*	Greensboro, N. C.	45	Murray, Dougal & Co., Ltd.	10	Southern Railway Supply Co.	21	
Bailey-Lebby Co.	14	Crompton Loom Works	42	Guardian Security, Trust & De-	25	Murray, James, & Son	22	Spence, L., & Son	19	
Baldwin Locomotive Works	31	Cronk Hanger Co.	28	Guibert, John C. N.	*			Standard Dry-Kiln Co.	39	
Ball, Geo. C., & Co.	27	Crosby, G. A., & Co.	34	Guild & White	12	N		Standard Electric Co.	47	
Baltimore Engraving Co.	*	Cummer, F. D., & Son Co.	14	"G. W. T."	26	Nanz & Co.	17	Starr, B. F., & Co.	28	
Baltimore Storage & Light Co.	44	Curtis & Marble	43	H		National Building Supply Co.	*	Stebbins, Wallace	31	
Baltimore & Eastern Shore R. R.	*	Cushman Iron Co.	34	Haden, C. J.	28	National Pipe Bending Co.	18	Stedman's Fdy. & Machine Wks.	22	
Barber & Ross	15	Cutler Mfg. Co.	24	Halldeman, N. A., & Co.	34	Newell Bros.	20	Steel Rail Supply Co.	27	
Barnes, W. F., & John, Co.	30			Halpin, William	48	New Jersey Car Stor. & Repair Co.	27	Stevens, H., Sons Co.	25	
Barrett, S. E., Mfg. Co.	35	D		Hananah, J. Ross	12	Newport News Shipbuilding & Dry	27	Stewart, Edwin, Paymaster-Gen.	25	
Bass Foundry & Machine Works	18	Daugherty Typewriter Co.	25	Hardy, F. H.	12	Dock Co.	31	Stewart, Jas., & Co.	15	
Bates, Jas.	15	Davies, Chas., & Co.	*	Harrington, E., Son & Co.	15	New York Belt & Pack'g Co., Ltd.	31	Stilwell-Bierce & Smith-Valle Co.	40	
Bauer Cooperage Co.	26	Davis & Cox	12	Harrington & King Perforat'g Co.	16	New York Equipment Co.	27	Stow Flexible Shaft Co., Ltd.	14	
Bay Line	44	Davis, Frank E.	12	Harris, N. W., & Co.	25	New York Machinery Depot	27	Stow Mfg. Co.	15	
Beach, H. L.	44	Davis, L. W.	47	Hartford Steam Boiler Inspection	20	New York & New England R. R.	27	Strack, Ewald H.	*	
Bell, Thos. J., & Co.	48	Davis Foundry and Mch. Works	41	Insurance Co.	20	Nichols, W. A.	26	Streeter, Alvin	15	
Benjamin, L. R., Investment Co.	45	Davis, Kelly & Co.	27	Haven Elevator Co.	10	Nicholson File Co.	48	Stuebner, G. L., & Co.	22	
Bennet, D. S.	39	Dayton Gas & Gasoline Engine Co.	20	Hay Foundry & Iron Works	46	Nichols, W. J.	48	Sturtevant, B. F., Co.	43	
Berger Bros.	*	Dean Bros. Steam Pump Works	40	Heffernan, Wm. A.	34	Niersee & LaMotte	12	Sturtevant Mill Co.	23	
Berger Mfg. Co.	35	Decatur Shaft Support Co.	15	Help Wanted	28	Niles Tool Works Co.	27	Sullivan Machinery Co.	23	
Berlin Machine Works	37	De Kalb, Courtenay	12	Hender, A. L.	14	Norfolk & Western Railroad	24	Supplier Steam Engine Co.	19	
Berry & Orton Co.	39	De Loach Mill Mfg. Co.	39	Hendrick Mfg. Co., Limited	*	Norfolk & Western Railroad	24	Sweet, B. F. & H. L.	14	
Betts, J. H.	44	Deming Co.	39	Heywood, Warfield & Co.	12	Norton Emery Wheel Co.	30	Sweeton, D. S.	30	
Bickford Drill & Tool Co.	30	Denning, F. H.	26	Hickman, Williams & Co.	27	Nye & Fredrick	42	Sydnor & Shepard	*	
Big Four Route	*	Diffenderfer, J. K. E.	12	Hicks Gas Engine Co.	30	O				
Billings & Spencer Co.	30	Disston, Henry, & Sons	37	Hill, Nicholas S., Jr.	12	Ober Lathe Co.	39	T		
Birmingham Boiler Works	15	Disston Land Co.	45	Hirsch, L. C., & Co.	33	Obermayer, S., Co.	40	Talbot & Sons Co.	19	
Bliss, E. W., Co.	14	Dixon, Jos., Crucible Co.	48	Hodges, Geo. M., Receiver	26	Old Dominion Elec. Cons. Co.	40	Tanner, C. W., & Co.	15	
Bolzano Mfg. Co.	10	Dopp, H. Wm., & Son	32	Hollingsworth, Wm.	20	Old Dominion Line	44	Taper-Sieve Pulley Works	14	
Bolles, J. E., & Co.	34	Dorner & Dutton Mfg. Co.	47	Holmes, E. & B.	39	Orr, Jas. L., Receiver	26	Texas Iron and Brass Works	30	
Bonaparte, Charles J.	26	Dow Wire Works Co.	16	Homans, Benjamin	28	Otto Gas Engine Works	24	Thompson, Percy, & Co.	35	
Boomer & Boschert Press Co.	25	Draper, Geo., & Sons	24	Hoopes & Townsend Co.	31			Thora Shingle & Ornament Co.	35	
Boston Belting Co.	17	Draper Machine Tool Co.	30	Hopkins, Johns, Oil Co.	46	P		Thursby, James E.	47	
Bowman, A. B.	27	Dudley, S. A.	42	Hotchkiss, L. L.	28	Pancoast, Henry B., & Co.	31	Tirill Gas Machine Co.	28	
Bowman, Ezra F., & Co.	16	Dufur & Co.	16	Howard Bros. Mfg. Co.	42	Paret & Farquhar	12	Titus, E. E.	39	
Bradley Pulverizer Co.	22	DuQuoin Iron Works Co.	38	Hubbard, Alva, & Co.	15	Patapasco Rubber Co.	16	Toomey, Frank	27	
Bradstreet Co.	15	Dunn, C. W.	25	Hughes, Chisolm & Co.	14	Patterson Mills Co.	26	Trench, Daniel G., & Co.	16	
Braxton, Carter M.	44	Dunning, W. D.	25	Hutchisson, James F.	12	Paul, Thos. H., & Son	20	Trenton Iron Co.	31	
Bremer, Godfrey J.	30	Duval, J. E.	12	Hyde, George A.	28	Peacock, George	21	Trevor Mfg. Co.	38	
Brewer, H., & Co.	32			I		Pen Argyl Iron Works	*	"Trustee"	26	
Brighton Machine Works	*	E		Illinois Central Railroad Co.	*	Penberthy Injector Co.	26	Truxal & Dummeyer Mfg. Co.	18	
Brooks, T. H., & Co.	34	Eagle Boiler Works	19	India Alkali Works	42	Penn Elevator Engineering Co.	10	Tudor Boiler Mfg. Co.	19	
Brown & Garber	12	Eames, G. T., Co.	14	Indiana Machine Works	37	Pennsylvania Machine Co., Ltd.	27	Turman, Solon B.	28	
Brown Electric & Machinery Co.	47	Easton & Burnham Machine Co.	43	Ingersoll-Sergeant Drill Co.	24	Pettee Machine Works	43	Turrell, Clarence A.	12	
Buckeye Iron and Brass Works	41	Eccles, S., Jr.	28	Ingham, George	42	Phelps Bros. & Co.	14	Tyler & de Funiak	12	
Buckeye Mfg. Co.	20	Eidunburg Foundry & Machine Co.	38			Philadelphia Drop Forge Co.	15			
Burnham Bros.	41	Eisenbrandt Cycle Co.	26	J		Philadelphia Eng. Works, Ltd.	15	V		
Burns Mfg. Co.	33	Elbert & Gardner	16	James & Co.	30	Phila. Textile Machinery Co.	42	Vaile & Young	34	
Burt Mfg. Co.	16	Electrical & Mechanical Engineer-	*	Jameson Fire-Resisting Paint Co.	35	Phenix Iron Works Co.	10	Valk & Murdoch Iron Works	19	
Burton, W. J., & Co.	35	ing & Trading Co.	*	Jarden Brick Co.	14	Phenix Rubber Co.	28	Valley Railway	19	
Byers, Jno. F., Machine Co.	15	"Electricity"	26	Jarman, Geo. R.	33	Pickrell, Percy A.	25	Van Duzen Gas & Gaso. Eng. Co.	20	
		Eller, J. H., & Co.	35	Jeffrey Mfg. Co.	21	Place, George, Machine Co.	27	Van Duzen & Tift Co.	40	
C		Ellerhorst, J. G., & Co.	33	Jenkins & Conran	29	Plenty, Josephus	34	Van Winkle Gin & Machinery Co.	43	
Cabarrus Cotton Mill	26	Ellicott Machine Co.	43	Johns, H. W., Mfg. Co.	25	Pneumatic Watchman Check Co.	*	Virginia Soapstone Co.	21	
Caldwell, H. W., & Son Co.	25	Elmore Iron Works	15			Porter, H. K., & Co.	31			
Camden Steel Roofing & Cor. Co.	35	Emerson, Smith & Co.	39	K		Powell, Wm., Co.	27	W		
Cameron, A. S., Steam Pump Wks.	40	Empire Paint & Roofing Co.	39	Keasbey & Mattison Co.	21	Powhatan Clay Mfg. Co.	14	Walke, Henry	34	
Cameron & Barkley Co.	14	Employers' Liability Assurance	*	Kells & Sons	32	Pratt, N. P., Laboratory	12	Walker & Elliott	14	
Canning, Reginald, & Co.	27	Corporation, Ltd.	*	Kelly, O. S., Co.	21	Prentiss Tool & Supply Co.	30	Warfield, S. D., Co.	16	
Canton Saw Co.	*	Engineering Appliance Co.	20	Kemper, Charles E.	25	Price & Co.	28	Warren Chemical & Mfg. Co.	35	
Cardwell Machine Co.	43	Eppler, C., & Sons	*	Kent, R. S., & Co.	12	Price & Heald	29	Waterman Machine Tool Co.	2	
Carlin's Sons, Thos.	37	Eureka Fire Hose Co.	*	Kilbourne & Jacobs Mfg. Co.	48	Puisometer Steam Pump Co.	40	Watkins, J. B., L. M. Co.	45	
Carnell, George	22	Eureka Gas Engine Co.	20	Kilburn, Lincoln & Co.	42			Watson, H. F., Co.	35	
Caroline Iron Works	23	Evans, George C.	27	Killion, W. F., & Co.	47	Q		Watts-Campbell Co.	26	
Carpenter & Peebles	12	Exchange Banking & Trust Co.	25	Kimes, J. B., & Co.	34	Q. & C. Company	48	Webster, Warren, & Co.	19	
Carter's, Jno. S., Dairy Sup. House	16	Exeter Machine Works	23	Kingsland & Douglas Mfg. Co.	39	Quadruple Steam Pump Co.	40	Webster Mining & Impr. Co.	28	
Carver Cotton Gin Co.	42			Knowles Loom Works	43	Queen City Printing Ink Co.	44	Weir Frog Co.	10	
Cassell, Chas. M.	12	F				Queen City Supply Co.	43	Weller Mfg. Co.	22	
Caswell, W. G.	26	Famous Mfg. Co.	39	L		Queen & Crescent	*	West, Wm. C.	25	
Chandler & Taylor Co.	19	Farquhar, A. B., Co., Ltd.	32	Land, M. W., & B. F. Cox	12	Quickel, E. & A.	16	Western Maryland Railroad	*	
Charlotte Dye Works	42	Faul, W. J.	32	Landreth, Olin H.	12			Western Telephone Construc'n Co.	47	
Charlotte Machine Co.	43	Fay, J. A., & Egan Co.	26	Lane Manufacturing Co.	25	R		Whaley, W. B. Smith, & Co.	12	
Charlotte Supply Co.	42	Fay, J. A., & Egan Co.	26	Leesburg Development Co.	26	Ralston & Co.	27	Wheeling & Lake Erie Railway	*	
		Fay, J. A., & Egan Co.	26	Leffel, James, & Co.	26	Rand Drill Co.	23	White, Thos. H., & Co.	14	
		Fay, J. A., & Egan Co.	26	Lehmann & Glaser	12	Raymond Bros. Impact Pulv. Co.	23	White & Middleton Gas Engine Co.	20	
		Fay, J. A., & Egan Co.	26	Leslie, T. H.	45	Read, Chas. H., Jr.	12	White, L. & J. Co.	*	
		Fay, J. A., & Egan Co.	26	Lidgerwood Manufacturing Co.	21	Reading Wood Pulley Co.	32	Whitinsville Spinning Ring Co.	43	
		Fay, J. A., & Egan Co.	26	Liggett Spring & Axle Co.	24	Record Printing House	*	Whitney, E. S.	12	
		Fay, J. A., & Egan Co.	26	Lindsay, J. L.	43	Redfield Co.	16	Wiggins-French Engineering Co.	23	
		Fay, J. A., & Egan Co.	26	Linhad Dado Machine Co.	39	Rees, C. B.	45	Williams, M. F., & Co.	14	
		Fay, J. A., & Egan Co.	26	Link-Belt Engineering Co.	21	Rees, George S.	45	Williams, John L., & Son	25	
		Fay, J. A., & Egan Co.	26	Lodge & Shipley Mch. Tool Co.	27	Remington Machine Co.	33	Williams, J. R., & Co.	34	
		Fay, J. A., & Egan Co.	26	Lombard, Geo. R., & Co.	15	Repauno Chemical Co.	15	Williamsport Machine Co.	39	
		Fay, J. A., & Egan Co.	26	Long & Allstatter Co.	30	Reuter & Mallory	26	Wilson, C. C.	12	
		Fay, J. A., & Egan Co.	26	Lookout Steam Boiler Works	20	Rhoads, J. E., & Sons	17	Wilson, Jas. G., President	45	
		Fay, J. A., & Egan Co.	26	Lubrolite Oil Co.	42	Rhode Island Tool Co.	21	Wolf, Aug., & Co.	27	
		Fay, J. A., & Egan Co.	26	Lucas, C. O., & Co.	40	Richardson, C. F., & Son	14	Wolfenden, Thomas T.	24	
		Fay, J. A., & Egan Co.	26	Ludlow-Saylor Wire Co.	16	Richmond & York River Line	44	Wood, R. D., & Co.	41	
		Fay, J. A., & Egan Co.	26	Ludlow Valve Mfg. Co.	41	Richmond City Mill Works	28	Wood's T. B., Sons	32	
		Fay, J. A., & Egan Co.	26	Lum, George E.	19	Richmond Loco. & Mch.				